MARYLAND STATE PLANNING COMMISSION

MARYLAND

FEDERAL PUBLIC WORKS PROGRAM

1924-1940

Prepared by

I. Alvin Pasarew

June 1941

MARYLAND STATE PLANNING COMMISSION

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June 1941

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Latrobe Hall, The Johns Hopkins University
Baltimore, Maryland

January 15, 1941

Dr. Abel Wolman, Chairman
Maryland State Planning Commission
The Johns Hopkins University
Baltimore, Maryland

My dear Dr. Wolman:

I am pleased to submit herewith a report outlining Federal public works expenditures made in Maryland during the period of 1924 to 1940 inclusive.

This report summarizes the various activities and expenditures made by the several Federal agencies who have participated in public works construction in Maryland during the seventeen year period prior to 1941. In summarizing these data, significant highlights of each agency's functions and expenditures were presented, indicating their influence upon the type and character of projects sponsored.

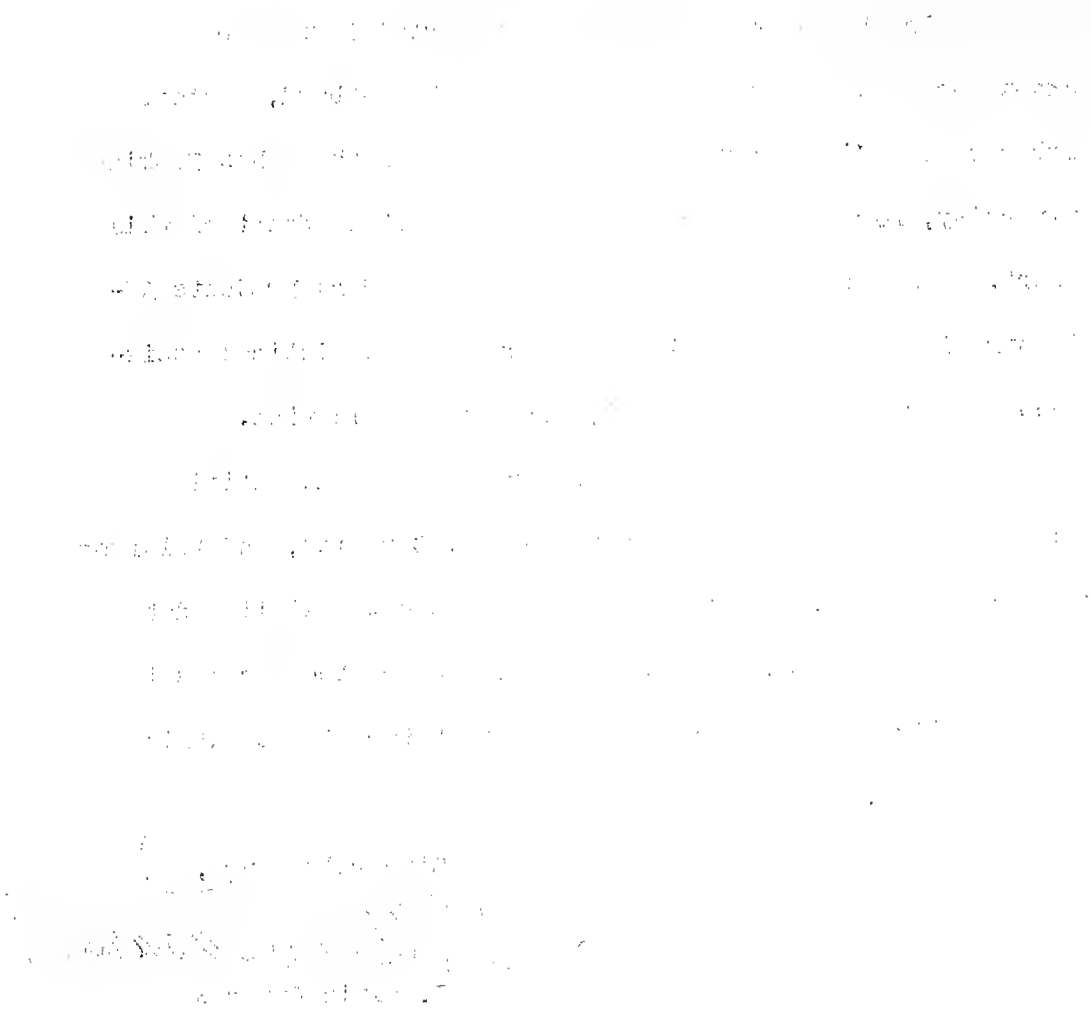
Unfortunately, there appears to be a lack of uniformity in the character of factual data available from the various Federal agencies. This fact has made it extremely difficult to present in summarized form, under a uniform classification of public works, expenditures as classified in the Commission's report entitled "Public Works Expenditures for the State, Counties and Baltimore City during 1924 to 1938". Nevertheless, when these two reports are reviewed concurrently, they will reveal the character, extent, and magnitude of public works improvements in Maryland during this seventeen year period.

In the preparation of this material I wish to acknowledge the assistance of Mr. Thomas F. Hubbard, a staff member of the Civil Engineering Department of the Johns Hopkins University, for his critical review of the final draft of this report. Acknowledgement is also made to the Work Projects Administration for the efficient clerical and statistical assistance rendered in the preparation of this publication.

It is hoped that this report and the one entitled "Public Works Expenditures for the State, Counties, and Baltimore City during 1924 to 1938" will furnish adequate detailed data and information in retrospect to enable interested persons to more intelligently envisage and evaluate future State public works programs.

Sincerely yours,

I. Alvin Pasarew



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FEDERAL PUBLIC WORKS PROGRAMS IN MARYLAND

This report of Federal public works expenditures in Maryland is prepared to supplement the Maryland State Planning Commission's recent report showing expenditures made by the State, counties, and Baltimore City for their public works improvements during 1924 to 1938 inclusive.

In presenting expenditures made by the Federal government, it was possible to extend the study through 1940 because of the availability of Federal data. The expenditures by State and local governments are not yet available for 1939 and 1940.

While an effort was made to segregate expenditures according to the classifications of public works as presented in "Public Works Expenditures for the State, Counties and Baltimore City during 1924 to 1938", it was found that in practically all cases, the Federal agencies supplying data could not furnish their respective material in a form enabling tabulation under such classifications. Nevertheless, these data were summarized annually and do present a clear picture of the expenditures made by the Federal government for public works improvements throughout the State, and also the purpose and extent of these improvements.

The term "public works" used in this report is intended to imply such public construction and improvements which, by their very character and durability, are of long-lasting public utility and necessity.

In considering the public works program of Maryland, consideration was given not only to routine or regular public improvements of the various Federal agencies, but also to such public works which were made possible through the various "relief" or "emergency" programs initiated since 1933.

Since 1924, the initial year of this report, the Federal government, through many of its various agencies, was making substantial appropriations annually, principally toward the State's roads program and for dredging harbors. Annual expenditures for Federal public works construction and improvements during 1924 to 1933 averaged between $2,000,000 and $3,000,000, after which the Federal government undertook its vast public works construction programs.

The general trend of public works construction changed materially with the advent of the Public Works Administration and the Works Progress Administration. Significantly, this trend brought about the establishment of a medium by which the State and its political subdivisions could construct many badly needed improvements, where heretofore this was not possible because of financial difficulties. The Federal government encouraged these State and local programs by offering loans and grants, thus providing immediate employment aimed at curtailing the rapidly increasing relief rolls.

Federal appropriations for public works in Maryland increased from $3,429,247 in 1933 to $26,316,025 in 1934. This rose to an all time high of $36,714,043 in 1937.

No attempt has been made in this report to analyze the various public works programs and their effects on the social and economic structure of the State, but merely to present, in summarized form, pertinent detailed financial and statistical data on physical accomplishments throughout the State by the various Federal agencies.

D E P A R T M E N T O F A G R I C U L T U R E

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

The Bureau of Entomology and Plant Quarantine* was created by Congress to study the life history and the habits of insects both injurious and beneficial to agriculture and forestry.

Its investigations deal primarily with the eradication of insects affecting the health of man and wild and domesticated animals and the control of plant diseases. It also conducts chemical investigations, in cooperation with other states, in the development of new insecticides and fungicides, and enforces methods of preventing the introduction of plant pests.

This Bureau, during the period of this study, sponsored two projects in Maryland. During the period 1934 to 1936 the Bureau constructed an entomological laboratory, greenhouses, and a mushroom plant at the Beltsville Research Center at a cost of $139,458. The entire cost of construction at the Research Center was borne by the Federal government.

During the period 1934 to 1940 the Bureau's work consisted solely of studies on blister rust control. This control consists of the protection of valuable pine forest by the eradication of currant and gooseberry bushes which spread white pine blister rust. This disease attacks all native species of white pine and endangers the State's existing stands as well as the young growths having an even greater potential value. The research was not confined to any particular locality, but was conducted in areas throughout the State.

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* Created by an organizational merger provided for in the Agricultural Appropriation Act of 1935.

The Maryland State Department of Forestry cooperated in this work by contributing $10,654 during the years 1933 to 1940. The Federal government, as its share towards the program, contributed a total of $95,345 during 1932 to 1940.

D E P A R T M E N T O F A G R I C U L T U R E

FARM SECURITY ADMINISTRATION

The Farm Security Administration* has aided more than 800 Maryland families with low income producing farms to become self-supporting instead of being dependent upon relief for their existence.

The construction of a model 3,411 acre suburban housing project at Greenbelt, between Baltimore and Washington, was undertaken by this Administration. This development was designed to accommodate 885 urban families. Of the 3,411 acres of land purchased for the development, 120 acres were used for residential areas, and more than 3,100 acres for parks and reserves for future expansion. A total of 880 new family dwellings and 369 miscellaneous structures were constructed. Included in this total of miscellaneous structures were 363 garages, commercial buildings, and a fire house.

The project at Greenbelt is the only public works construction sponsored by this Administration in the State. Ground for this project was broken October 1935, and it was completed during 1938. It was financed, both as to planning and construction, with funds allocated from the Farm Security Administration, formerly known as the Resettlement Administration.*

The total expenditures for the Greenbelt project for the period 1936 to 1940 amounted to $13,404,725. This amount includes only development and construction costs and does not include any operating expenses

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* Created by the Emergency Appropriation Act, approved 1935; known as Resettlement Administration from April 1935 to September 1937.

One of the many noteworthy features of this development is the layout. The main streets are laid out in the pattern of a horseshoe-shaped ridge. Shops, schools, and other community buildings are grouped in the center of the horseshoe where they are easily accessible from all parts of town. The houses are grouped in super blocks approximately four to five times as large as the average city block. Instead of facing the street, nearly all the houses face the interior of the block which is laid out with lawns and playgrounds. Paths, safe from traffic, run through these interior parks, and no sidewalks are necessary along the streets. In planning this development, preference was given by the Greenbelt authorities to row houses and apartments as against the construction of single dwellings.

Greenbelt does not have any farms within its corporate limits. Produce is obtained from a farmers' market in the center of the city.

For its water supply, Greenbelt pipes its water from the near-by lines of the Washington Suburban Sanitary Commission Water District, and stores it in a 2,000,000 gallon standpipe from which it is distributed to the community.

Greenbelt has a seven-grade elementary shool. This building is used for both youth and adult education, and also has facilities for a library and arts and crafts. The auditorium in this building is also used as a gymnasium and for church services.

In planning for the future development of the community's public facilities, such as streets, sewerage works, waterworks, and schools, provisions were made in the design to allow for a three-fold expansion of the community. This was an important consideration in evaluating its cost. A considerable immediate saving could have been made if these utilities were built only to accommodate the original

number of homes, but in that case much larger future expenditures would have been necessary as the town expanded.

The Federal government collects more than $400,000 from Greenbelt every year. This amount includes rentals from 886 houses, garages, store buildings, and the motion picture theatre, together with the sum paid by the tenants for water, electricity, and heat.

Rentals range from $18 to $41 per month, with an average rental of $31.23 which includes heat. Electricity and water consumption are billed separately on the basis of quantities used. It is estimated that the average family pays 90 cents per month for water and $3.00 per month for electricity which is used for cooking purposes as well as for lighting and refrigeration.

Greenbelt has 885 dwellings in the town proper and one dwelling in the rural area. There are 574 units in group houses, all but 16 of which are two-story dwellings. The rental for the two-story dwellings, including heat, runs from $29 per month for four-room houses up to $39 per month for seven-room houses; a few units with full basements rent for $41 per month. Five detached houses of experimental fabricated design are included in the project; these rent for slightly more than the group houses.

The remaining 306 dwelling units are in apartments. The rents charged for these units include janitor service, heat and water. Apartment rentals run from $18 per month for one and one-half room dwellings to $27 per month for three room apartments. Apartments with sleeping porches cost up to $5.00 more.

Residents of Greenbelt are selected from applicants whose incomes range from $1,000 to $2,200 per year. In special cases, large families with slightly over $2,200 are also considered. The average

annual income of the residents of the town is between $1,500 and $1,700.

The following annual expenditures were made by the Farm Security Administration for the construction of this development:

Fiscal Year	Amount
1936	$ 1,814,665
1937	8,920,854
1938	2,595,915
1939	69,949
1940	3,342
Total	$13,404,725

D E P A R T M E N T O F A G R I C U L T U R E

BUREAU OF PLANT INDUSTRY

The United States Horticultural Station at Beltsville, Maryland, conducts investigations relative to problems in breeding, physiology, cultural requirements, propagation, diseases and handling and storage of horticultural crops, including fruits, nuts, vegetables, ornamental and florists' plants.

Studies are also in progress to determine the influence of the length of day on plant responses and the effects of hormones or growth stimulating substances on plant growth. This work is conducted in greenhouses, laboratories and in the field.

The nature of the facilities make it possible in some of these studies to continue the research throughout the year. Twenty-three greenhouses, forty well-equipped laboratories and seven hundred acres for field tests constitute the existing plant facilities.

The Bureau of Plant Industry* comprises the following divisions: Division of Fruits and Vegetables, Division of Crops and Diseases, Division of Drugs and Related Plants, and the Division of Nematology which deals with the disease of plants that is caused by nematodes or eelworms.

Expenditures made by this Bureau for public works construction were for improvements at the United States Horticultural Station near Beltsville and at the United States Plant Introduction Garden at Glendale, both in Prince George's County.

Expenditures for improvements at Beltsville were made from appropriations by the Public Works Administration, totalling $457,077

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* Created by the Agricultural Appropriations Act of 1902.

for the fiscal years of 1934 to 1938. Additional improvements were made from regular appropriations, which totalled $101,425 for the fiscal years 1934 to 1936. At the Glendale station, the Public Works Administration provided an appropriation in 1934 of $17,179, while the Bureau, from its regular appropriations, spent $55,436 in necessary improvements during the fiscal years 1924 to 1938.

Improvements made possible by the Public Works Administration at the Glendale bureau from the appropriation of $17,179 were: quarantine greenhouse, partitions in greenhouse and installation of deep seed pit, overhauling of heating system, and cold storage unit for seed and nursery stock with automatic temperature control throughout. From the regular appropriations of $55,436, the following improvements were made: greenhouses, Headhouses, storage sheds, soil sterilization building, pump shelters, office and laboratory building, road and bridge construction, irrigation system, reservoir, tile drainage and sewer, electric, heating and ventilation systems.

Types of work constructed in the Beltsville area consist of water mains, irrigation and drainage ditches, roads, walks, levees, installation of electric power facilities, bank storage cellars, staff laboratories and research buildings, greenhouses, foreman's cottage, propagating house, bath and screen houses, soil and fertilizer house, hot beds, cold frames, garages, implement shed, tool sheds, fruit products laboratory, spray system, fencing, pumphouse, and sewers and septic tanks.

D E P A R T M E N T   O F   A G R I C U L T U R E

FOREST SERVICE

The work performed by the Forest Service* includes the construction and maintenance of fire-breaks, forest-fire lookout towers and observatories, landing fields, telephone lines, forest roads and trails, and miscellaneous buildings and structures. Project workers have also planted, improved, and developed tree nurseries, thinned forest stands, combated insects and diseases, killed range-destroying rodents, eradicated poisonous plants, and aided in the development of fish and game resources. The Forest Service similarly conducts research work of various types, including surveys and studies relating to forests, ranges wild-life and the management of lands and watersheds.

Forest Service expenditures for the fiscal years 1924 to 1940, inclusive, amounted to $2,809,505. Of this amount, $7,700 was spent during 1924 and 1925 for cooperative experimentation in fire protection under the Weeks Act; $152,633 for the years 1926 to 1940, inclusive, for fire protection under the Clarke-McNary Act; $26,851 for the distribution of forest planting stock under the Clarke-McNary Act for the years 1926 to 1940, inclusive; $2,621,283 for the years 1935 to 1940, inclusive, for work done by the Civilian Conservation Corps on other than national forest lands; and in 1940, $1,038 was spent under the Norris-Doxey Cooperative Farm Forestry Act for tree distribution.

The work performed by the Civilian Conservation Corps for the Forest Service on other than national forest lands for the state, from April 5, 1933 to June 30, 1939, includes the following physical accomp-

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* [illegible]

lishments; 198 bridges (foot, horse and vehicle); improvement and enlargement of three diversion dams; 380 rods of fence; 204 miles of telephone lines; 2,223 signs, markers and monuments; 319 miles of truck trails or minor roads; 60 miles of foot trails; 753 acres of field planting or seeding (trees); improvement of 43,185 acres of forest stand; improvement and development of nurseries (2,729 man-days); fighting of forest fires (16,925 man-days); construction of fire breaks (14,900 miles); fire hazard reduction, roadside and trailside (730 miles); other fire hazard reduction (12,900 acres); fire prevention (476 man-days); tree and plant disease control (27,459 acres); tree insect pest control (4,781 acres); moving and planting of 4,110 trees and shrubs; construction of 9,127 square yards of parking areas and parking over-looks; razing of undersirable structures and obliterations (4,976 man-days); emergency work (6,372 man-days); surveys (4,733 man-days) and 54,852 acres of timber estimating.

Work done in the field by the Civilian Conservation Corps from 1933 through 1939 was conducted in the following counties: Garrett, Allegany, Prince George's, Charles, Washington, Howard, Frederick, Worcester, Somerset, Dorchester, Wicomico and Baltimore County.

Beltsville Research Center (Forest Service)

The area under the jurisdiction of the Forest Service at the Beltsville Research Center comprises approximately 1,800 acres, practically all of which is under some form of forest cover.

The recent completion of the Center's physical plant facilities form a nucleus for its projected future activities. These facilities consist of an office laboratory building, a residence dormitory, a garage store-room and two residences.

The program of research now being formulated is devoted chiefly to certain phases of tree physiology and soils. The prospective program contemplates work on: (1) national problems concerning planting and forest production and (2) the problem of management of the forst resources in its experimental tract.

Because of the certain natural advantages such as opportunities for inter-bureau contacts, together with adequate and free interchange of both ideas and personnel with other field stations, this new forest service laboratory and experiemental area should facilitate an integrated and forceful approach to many forest problems, thus rendering their solution more probable.

The Service operates a domonstrational area at Catoctin.

Four project headquarters have been installed in Maryland. They are: (1) Beltsville Community Housing Project, Headquarters at Beltsville in Prince George's County; (2) Garrett County Project, Headquarters at Grantsville in Garrett County; (3) Eastern Shore Project, Headquarters at Salisbury in Wicomico County; (4) Catoctin Project, Headquarters at Thurmont in Frederick County.

(1) The Beltsville Community Housing Project provided for the supervision, planning, acquisition and purchase of land for housing facilities. This work, which was performed during the fiscal years 1936, 1937 and 1938, amounted to $46,741. There were no expenditures during 1939 and 1940.

(2) The Garrett County Project provided for the purchase of land and the protection, supervision and improvemntof the land acquired. This included stand improvement; seed collection and nursery work; fire hazard reduction; plant disease control; biological conditioning; stream improvement; forestry and wild life improvement; soil erosion control; and development of an organized group camp with camping and recreational facilities. A sum of $855,039 was spent during the fiscal years 1936 to 1940, inclusive.

(3) The Eastern Shore Project provided for the purchase of land and the protection, supervision and improvement of the land acquired. This consisted of considerable forestry development and seed collection; nursery work; biological conditioning; fire hazard reduction; drainage work; soil erosion control; and development of camping, recreational and administrative facilities. Amounts expended during the fiscal years 1936 to 1940, inclusive, totaled $506,846.

(4) Catoctin Project provided for the purchase of land, protection, supervision and improvement of the land acquired. This program included reforestation, soil erosion control, development of a children's and family

vacation camp. The cost of this work, which was performed during the years 1936, 1937 and 1938, amounted to $146,535.

The cost of supervision and work performed on the four projects amounted to $1,555,161 for the fiscal years 1936, 1937 and 1938.

Beltsville Research Center (Soil Conservation Service)

The Soil Conservation Service is also cooperating in the development of the Department of Agriculture Beltsville Research Center at Beltsville. However, the activity of the Soil Conservation Service is financed from funds made available for other purposes as well, and the portion applicable to the Beltsville Research Center cannot readily be determined.

This unit is developing an area for testing practices applicable to a wide variety of problems of interest to the State's soil conservation program. This area consists of approximately 1,700 acres.

The work at the station features both research and observational studies dealing with the economic value of erosion-resisting plants, and with practical methods of improving and utilizing hill and erodible land in accordance with sound soil and water conservation principles. This work is a cooperative undertaking of the Soil Conservation Service, the Maryland State Agricultural Experiment Station and interested bureaus of the Department, especially the Bureau of Plant Industry. Work is now in operation by the Hillculture Division, Nursery Division, Forestry Division, and the Climatic and Physiographic Division.

D E P A R T M E N T O F A G R I C U L T U R E

SOIL CONSERVATION SERVICE

The name, Soil Conservation Service*, is only a partial clue to the scope of the Bureau's many activities. Established in 1933 as an emergency agency, almost exclusively for the job of soil erosion control, its functions were permanently established by the Soil Conservation Act of 1935.

Today, however, this organization is helping farmers to make constructive changes in the physical treatment of their land, the object being to conserve the soil and water resources and provide for the greatest utilization and benefits from these resources. The program consists of the adoption of modern conservation farming practices, the development of farm woodlands as an economic asset and conservation measure, and the treatment of the land to help in controlling and preventing floods.

In essence, its program aims to bring about the most desirable adjustments in the use of agricultural land.

The Soil Conservation Service has been of much benefit to the State through its various programs for the control of soil erosion. According to reliable estimates, some 200,000 acres of land were being virtually destroyed each year, and the fertility of a still larger area was being constantly impaired. Upon a national basis, the estimated cost of such losses is conservatively placed at $400,000,000 annually. The Soil Conservation Service also has proven very beneficial through its programs relating to flood control, purchases and development of submarginal land, water facilities, soil conservation research, farm forestry, and erosion control assistance.

D E P A R T M E N T O F A G R I C U L T U R E

BUREAU OF DAIRY INDUSTRY

The Bureau of Dairy Industry* is one of a number of bureaus carrying on independent research at the Beltsville Research Center.

Its investigations pertain to dairy cattle breeding, feeding and management, which includes studies in the effectiveness of line breeding; out-breeding and in-breeding; in fixing inheritance for producing ability in dairy cattle; studies to determine the effect of nutrition and exercise; the relation of conformation and anatomy of dairy and beef cattle; and studies of growth of dairy cattle. Herds of registered Holstein-Friesian and Jersey cattle are maintained for experimental purposes.

Experiments are being conducted to determine the value of the European rotation and fertilizer methods of pasturing compared with the usual method of continuous grazing as practiced in the United States. Various methods of ensilaging grasses and legumes are being tested, and the relative losses of nutrients resulting from these methods are being determined.

Investigations in connection with nutrition, physiology of milk secretion and reproduction of dairy cattle are also under way at the Research Center.

Market-milk investigations, also conducted by this Bureau, involve the manufacture of dairy products and by-products on a semi-factory scale as a test of the results of laboratory experimentation. New or improved processes of manufacture are being constantly developod

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* Created by Public Act 156, 68th Congress, 1924; the present name appeared in the Agricultural Appropriation Act of 1927.

and tested to discover and remedy manufacturing defects. The principal activities now conducted include cheese making (both American and Swiss), casein production, manufacture of milk sugar, powdered milk, and condensed whole milk, skim milk and whey.

Improvements and expenditures made by the Bureau of Dairy Industry during the fiscal years of 1924 to 1940, from both regular and emergency funds, are herewith enumerated under the following three classifications: (1) Construction of Buildings; (2) Non-structural Improvements: and (3) Remodeling of Buildings.

(1) Construction of Buildings:

5 concrete silos
1 concrete straw barn
1 concrete bull barn
1 concrete boiler house
1 concrete nutrition barn
1 frame pump house
3 frame hay sheds
1 tile garage
1 frame feed shed
1 concrete autopsy building
1 frame animal house
1 concrete maternity barn
1 frame hay barrack
1 frame cow shelter
1 concrete animal hospital
2 concrete cow barns
1 concrete chemical storage vault
3 cement stave silos
1 silo shed
1 frame and concrete mule barn
1 concrete carpenter shop
1 frame quarantine barn
1 concrete mechanical superintendent cottage
1 concrete scale house
2 frame scale houses
1 concrete physiological laboratory
1 brick incinerator
1 concrete nutrition laboratory
1 concrete milking shed
1 frame nutrition laboratory
2 frame young stock sheds
1 concrete milk producing laboratory
1 frame animal physiological house

The cost of construction of these buildings during this period amounted to $448,163 of which 136,923 was appropriated from regular and 311,240 from emergency funds.

(2) Non-structural Improvements: Fencing, grading of roads and walks, water system, sewerage system, electric system, underground steam system and spray pond. The cost of these improvements, made during the fiscal years 1924 to 1940 inclusive, amounted to $13,896 from regular and $151,299 from emergency funds, a total of $165,195.

(3) Remodeling of Buildings: Frame superintendent's house, concrete herdsman's cottage, concrete administration building, frame dairy barn and silo shed, frame and concrete calf barn, and frame test barn. Remodeling costs for the fiscal years 1924 to 1940, inclusive, amounted to $18,573 from regular and $50,308 from emergency funds, a total of $68,881.

The entire cost for construction, improvements and remodeling of buildings by this Bureau during this period amounted to $169,392 from regular and $512,847 from emergency funds, a total of $682,239.

D E P A R T M E N T O F A G R I C U L T U R E

RURAL ELECTRIFICATION ADMINISTRATION

The Rural Electrification Administration* might be termed unique in that it is one of the few agencies set up under authority of the Emergency Relief Appropriation Acts that will ultimately prove self-liquidating. This is primarily due to the fact that the Rural Electrification Administration makes no outright grants. All funds allocated for this program are for loans which are both self-liquidating and interest bearing.

The operations of the Rural Electrification Administration have proven so successful that for the fiscal year of 1939, appropriations for that agency were boosted to $140,000,000; three and one-half times the sum granted for each preceding fiscal year since 1935.

In the short span of four and one-half years, from May 1935 to December 1939, the Rural Electrification Administration financed power lines which stretched 180,000 miles through 45 states. In addition, there are 80,000 miles of power lines and 36 generating plants for which funds have been allotted and which are either under construction or in the planning stage. When this additional work is complete, the Rural Electrification Administration will have been the medium through which electric service was made available to approximately 750,000 consumers throughout the nation.

Prior to 1935, less than 7,000 or approximately 15% of the State's 44,000 odd farms were directly connected to central station power lines. However, largely through the cooperation of the Rural Electrification Administration, and the cooperatives receiving loans from this agency,

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* Created by Executive Order, 1935, under authority of Emergency Relief Appropriation Act of 1935.

15,000 or approximately 33% of Maryland farms were connected to a source of electric power by June 1939. As compared to the national average of 22.1%, Maryland enjoyed greater benefits from this program than did most states throughout the country.

These loans made by the Rural Electrification Administration to cooperatives in Maryland amounted to $1,008,000 from 1936 through November 1940. Of this total, $112,500 was used in the construction of a generating plant to provide electric power to consumers in Southern Maryland.

There are two Rural Electrification Administration Cooperatives in the State of Maryland: "The Choptank Cooperative, Inc.", on the Eastern Shore, and the "Southern Maryland Tri-County Cooperative Association", in Southern Maryland.

The "Choptank Cooperative, Inc.", had received aggregate allotments of $449,000 by June 1940. Upon final expenditure of these funds, construction will have been completed on 510 miles of power line servicing approximately 1,263 consumers in Caroline, Cecil, Dorchester, Kent, Queen Anne's, and Talbot Counties. This agricultural area is devoted largely to poultry raising and to vegetable packing and canning. In poultry raising, farmers throughout this area, as well as those throughout the nation, have learned the value of electricity. On the Eastern Shore, the complete modernization and mechanization of packing and canning plants, made possible by the availability of electric power, have done much to make operation more efficient and economical.

The "Southern Maryland Tri-County Cooperative Association", had received aggregate allotments of $559,000 by June 1940. Construction from funds allocated will witness the completion of 324 miles of line servicing about 1,153 consumers in Charles, Prince George's and St.

Mary's Counties and the construction of a $112,500 generating plant. The farmers in these three counties are chiefly interested in tobacco raising; however, recent trends have emphasized an increase in production of dairy and poultry products. It is believed that experiments now being conducted will develop economical application of electric power for the drying and curing of leaf tobacco. The value and multiple uses of electricity in dairy and poultry production are manifest.

D E P A R T M E N T O F C O M M E R C E

CIVIL AERONAUTICS AUTHORITY

The Civil Aeronautics Authority* has established air navigation facilities on federal airways which extend through Maryland. The work was accomplished on contract and force account basis with funds made available by the Civil Aeronautics Authority.

The following list constitutes a summary of the individual projects sponsored by the Authority and their costs:

1. Construction of intermediate field near Bowie 1929-1930, at an approximate cost of $6,000.

2. Rotating beacons established near Riverdale, Glenburnie, Perry Point, and Elkton in 1931-1932, at an approximate cost of $9,000.

3. Radio fan marker (experimental), Bowie, in 1935-36, expenditure approximately $5,000.

4. (a) Beacons near Middle River, Aberdeen, Iron Hill Ridge, and Hazen; cost $10,000 and

(b) A radio ultra-high frequency fan marker at Mason Springs in 1937-1938; cost $7,000.

5. Beacon near Phoenix in 1938-1939, at an approximate cost of $2,500.

6. Medium power loop type radio range station with teletype weather reporting service at Baltimore, Maryland, in 1939-1940, expenditure approximately, $35,000.

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* The Civil Aeronautics Authority was created by the Civil Aeronautics Act of 1938 and approved the same year, "to promote the development and safety and to provide for the regulation of civil aeronautics." The Act provided for the transfer to the Authority of the personnel, property and unexpended balances of appropriations of the Bureau of Air Commerce of the Department of Commerce and of the Bureau of Air Mail of the Interstate Commerce Commission. This was accomplished by Executive Order, August 22, 1938.

In addition to these air navigation facilities which actually serve as aids to navigation, the Civil Aeronautics Authority has also conducted a considerable amount of experimental work in the State, particularly at the experimental station near Silver Hill, and in connection with an experimental teletype station near Baltimore. Detailed data on cost of these experimental stations is not available at this time, inasmuch as the Civil Aeronautics Authority records are not broken down to show construction cost figures as against the cost of experimental work, nor the cost in connection with maintenance and operation.

In addition to the construction of these Federal facilities, the State has made expenditures annually for the maintenance, repair and operation of air navigation facilities in connection with its experimental work.

F E D E R A L S E C U R I T Y A G E N C Y

CIVILIAN CONSERVATION CORPS

Under the Act creating the Civilian Conservation Corps*, authority was granted this agency to promote and participate in the protection, restoration, regeneration, improvement, utilization, and maintenance of the natural resources of land and waters and their products, including forests, fish, and wildlife. The work includes the prevention and control of forest fires, forest tree pests and diseases, soil erosion, and floods. No projects are undertaken on lands other than those belonging to, or under the jurisdiction of, the United States, unless adequate provisions are made by the co-operating agencies of the states for the maintenance, operation, and utilization of such projects after completion.

The Civil Conservation Corps operates twenty-one camps in Maryland engaged in the restoration and the protection of the State's natural resources. Of these twenty-one camps, six are operating in State Forests, three in National Agricultural Research Centers, seven in Soil Conservation Service, three in National Parks and two in State Parks.

During the month of August 1939, there was an average of 3,955 C.C.C. enrollees doing conservation work in the State. Enrollees with Maryland residance, however, totaled 2,861. Since April 1933, the C.C.C. has furnished employment to over 21,000 Maryland enrollees between the ages of 17 and 23 and to 4,000 non-enrolled personnel from out of the State.

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* Created and approved in 1937 succeeding the agency known as Emergency Conservation Work. Effective 1939, the Civilian Conservation Corps was made a part of the Federal Security Agency in accordance with the Reorganization Act of 1939.

The C.C.C., together with the five cooperating departments of War, Interior, Agriculture, Labor, the Veterans Administration, and the large group of State relief and conservation agencies, has directed its major efforts to the attainment of the triple objective of alleviating unemployment, reclaiming and improving unemployed youth, and rehabilitating and conserving the nation's natural resources.

During the fiscal years of 1933 to 1940 inclusive, the amount expended in Maryland by the C.C.C. was $31,576,462.

Among some of the many physical accomplishments completed by the C.C.C. program from April 1933 through June 30, 1937 were:

(1)	Fighting forest fires	30,375 man-days
(2)	Lookout houses and towers	18
(3)	Tree disease control	23,247 acres
(4)	Truck trails and minor roads.	384 miles
(5)	Fire breaks	841 miles
(6)	Fire hazard reduction	13,500 acres
(7)	Forest stand improvement	36,865 acres

F E D E R A L S E C U R I T Y A G E N C Y

NATIONAL YOUTH ADMINISTRATION

The National Youth Administration* was created by Congress to aid young people through a program which embodied (1) Student Work Program: furnishing part-time employment to needy secondary school, college and graduate students unable otherwise to continue their studies; (2) Out-of-school Work Program: by providing part-time employment to out-of-school needy youths, chiefly from relief, on projects designed to afford valuable work experience; (3) Guidance and Placement Program: the establishment of job training, counseling, and placement services; and (4) Leisure Time Activities: encouragement and development of constructive leisure time activities for youths.

In the State of Maryland, $1,091,602 was expended by the National Youth Administration in furtherance of this program, of which $252,776 was spent for various types of construction projects, and $838,826 was spent for wages paid to needy high school, college, and graduate students to enable them to continue or complete their scholastic work.

School students employed were assigned to such jobs as clerical work, supervision of playground activities, and to assist in libraries and cafeterias. College and graduate students not only worked in the administrative offices of colleges, libraries, and museums on such phases of work that the university could not normally provide for from its operating expenses, but also in research and work closely related to their particular field of collegiate study.

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* The National Youth Administration was established within the Works Progress Administration on June 26, 1935 under the authority of the Emergency Relief Appropriation Act of 1935; it was transferred to the Federal Security Agency, effective July 1, 1939.

The National Youth Administration, as part of its program, was engaged in public works construction and improvements on a limited scale. Along this line, the Administration sponsored such activities as grading and improving school grounds for recreation; construction and erection of bus shelters for school children; landscaping, building log cabins and improving recreation facilities; sewerage works improvements; improving, repairing and painting schools; water main installation; sealing coal mines in Allegany County; flood rehabilitation work at schools; construction of fish ponds, drainage ditches, and forestry work; maintenance of buildings and equipment at the University Hospital, Maryland House, Carroll Mansion (in Baltimore City); construction of parking areas, bridges, and fireplaces; dismantling buildings and salvaging materials; repairing buildings and setting up school and recreation equipment for the Board of Education in Caroline County.

TYPES OF PROJECTS AND EXPENDITURES BY THE N.Y.A.
IN THE STATE OF MARYLAND

(Fiscal year ending June 30, 1939)

Types of Projects	1935-36	1936-37	1937-38	1938-39	Total
Highways	$ 182	$ 712	90	$ ---	$ 984
Schools	10,601	6,926	12,681	25,984	56,192
Recreation	757	904	7,134	63,597	72,392
Public Buildings .	3,457	23,484	21.874	29,087	77,902
Conservation . . .	212	---	---	1,072	1,284
Miscellaneous . .	---	29	---	---	29
Multiple	4,970	13,015	9,137	16,871	43,993
Totals	$ 20,179	$ 45,070	$ 50,916	$136,611	$252,776

F E D E R A L W O R K S A G E N C Y

PUBLIC ROADS ADMINISTRATION

The Bureau of Public Roads* administers the regular Federal aid funds for highways, the emergency appropriations for road construction, and those for the construction of forest roads. A large portion of the work is done cooperatively with the state highway departments, and contact with them is maintained through regional and district offices and state representatives. It conducts research into highway design, construction, transportation, and economics as an aid to the proper administration of Federal road funds. The Bureau also supervises the construction of national park roads for the National Park Service of the Department of the Interior.

During the seven years, 1933 to 1940, inclusive, the road building in the State of Maryland has been stimulated by Federal aid for the purpose of (1) providing employment and (2) building up an integrated system of State highways and secondary roads in a national highway system.

From the outset, the Federal program has embraced not only the extension of improvement of the Federal aid mileage in the State, but also, through the expenditure of emergency funds, of other state roads. Other work for which Federal funds have been expended includes the elimination of railroad grade-crossing hazards by the building of overpasses, underpasses and the relocation of dangerous crossings. Feeder or secondary roads have been improved to provide satisfactory farm-to-market roads in rural areas. At first, emphasis was placed on the improvement of the main truck highways. However, during the

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* The functions and personnel transferred from Department of Agriculture to Federal Works Agency and the name changed to Public Roads Administration under authority of Reorganization Plan No. 1, effective July 1, 1939.

past two years, the feeder or secondary roads program has assumed increasing importance.

In Maryland, from October 1933 through September 1938, 411.6 miles of roads were improved with the aid of regular and emergency Federal funds. This mileage included (1) Federal aid roads for which construction costs were equally borne by the State and Federal governments and (2) road improvements carried out entirely with Federal funds.

The Federal program of grade crossing elimination and protection in Maryland has resulted in the elimination of thirty-three grade crossings and the installation of flashing light signals at more than forty corssings. This particular type of work was completed during the period 1934 to 1938. Figures for other years are not available.

During the decade 1924 to 1934, the Federal government expended $8,019,970 as its share in the development in the Maryland Highway system. The effect of Federal aid to the State, subsequent to 1934, is appreciable. The State received over $22,000,000 for the period 1934 to 1940 for the construction and improvement of its highways.

Maryland, in cooperation with the Public Roads Administration, created a Highway Planning Survey which is now under the jurisdiction of the State Roads Commission. The preparation of a road inventory, a traffic survey and a financial and road-use inventory constitutes the work of this Survey. The following amounts were appropriated by the Bureau of Public Roads for the work of this Survey: in 1935, $27,151; in 1936, $72,575; in 1937, $15,375; in 1938, $26,591; in 1939, $25,935, and in 1940, $17,177. These appropriations for the Highway Planning Survey are not included in the annual totals for the Public Roads Administration shown on the following page.

FEDERAL FUNDS APPORTIONED TO MARYLAND DURING THE FISCAL YEARS 1924 to 1940

	GRANTS IN AID	FEDERAL AID	GRADE	HIGHWAY	FEEDER	GRAND TOTAL
1924	$ ------	$ 544,541	$ ------	$ ------	$ ------	$ 554,541
1925	------	635,945	------	------	------	635,945
1926	------	641,483	------	------	------	641,483
1927	------	634,624	------	------	------	634,624
1928	------	635,119	------	------	------	635,119
1929	------	634,906	------	------	------	634,906
1930	------	633,615	------	------	------	633,615
1931	------	1,734,758	------	------	------	1,734,758
1932	------	895,409	------	------	------	895,409
1933	------	1,019,570	------	------	------	1,019,570
1934	1,591,920	3,564,527	------	------	------	5,156,447
1935	1,000,000	1,810,058	------	------	------	2,810,058
1936	------	1,025,870	2,061,751	1,750,738	------	4,838,359
1937	------	1,025,870	------	------	------	1,025,870
1938	4,424,486*	1,043,938	519,393	------	208,787	6,197,204
1939	------	1,018,447	509,840	------	203,689	1,731,976
1940	------	846,765	200,663	------	123,205	1,170,633
GRAND TOTAL	$7,016,406	$18,355,445	$3,292,247	$1,750,738	$535,681	$30,950,517

POTOMAC RIVER BRIDGE	$ 2,351,970
SUSQUEHANNA RIVER BRIDGE	2,041,132
CHESAPEAKE BEACH BULKHEAD	31,384
	$ 4,424,486*

F E D E R A L W O R K S A G E N C Y

WORKS PROJECTS ADMINISTRATION

The Works Projects Administration, better known as the W.P.A. was created in 1935 to operate in cooperation with local governmental agencies as sponsors in the promotion of programs embodying useful public works projects, which, primarily, were to aid needy unemployed persons by providing work. At the same time it was hoped that such a program would stimulate employment opportunities in other industries, particularly those producing capital goods.

After January 1, 1940, sponsoring agencies were required to participate in this program by providing funds, services, and facilities to the extent of 25% of the total project cost. Further, these projects were planned to provide employment suitable to the skills and work experience of such needy workers as were to be found on the local relief rolls and such projects had to involve useful public improvements which could not otherwise be accomplished as a regular function of the sponsoring agency.

As of June 28, 1939, an estimated 13,941 persons were employed in Maryland on projects sponsored by the W.P.A. Total Federal funds expended in Maryland from the beginning of the program to June 30, 1940 amounted to $36,110,882. The annual expenditures for the several W.P.A. programs, for the work performed by the Construction Division of the Work Projects Administration were:

Fiscal Year Ending	Federal Funds	Sponsor's Funds
6-30-36	$ 7,632,131	$ 580,492
6-30-37	8,441,227	1,004,201
6-30-38	5,410,107	2,356,981
6-30-39	7,681,887	3,023,303
6-30-40	6,945,530	2,696,023
	$35,110,882	$9,661,000

In addition to the above, W.P.A. funds were expended through other Federal agencies as part of the bast emergency programs on miscellaneous projects throughout the State.

These projects were planned and sponsored by local public agencies. In practically all cases, the local agencies contributed to the cost of the project and in most cases provided local supervision.

As indicated above, the W.P.A. did not entirely conduct a Federal program. It required local planning, initiative, and financial support which resulted in a partner relationship between Federal and local governments.

The local community's contribution to the project paid the major portion of the cost of materials, supplies, and equipment. This reduced the Federal expenditures for these purposes, permitting the major portion of the Federal funds to be paid in direct wages to needy relief individuals.

It is estimated that every Federal dollar spent in this manner was divided as follows: 86¢ paid direct to the workers in the form of wages: about 3¢ for administrative expenses, other than pay rolls, and the remaining 11 cents for materials and equipment. Work Projects Administration operations have substantially expanded and improved the public facilities of the State of Maryland. Work accomplishments through June 30, 1940 are as follows:

HIGHWAYS, ROADS AND STREETS	Number or Amount	New Construction	Improvements
Highways, Roads and Streets (total)	1009 miles	-----	-----
Rural Roads	" 692 "	-----	-----
High-type surface	" 219 "	93	126
Low-type surfaced and unsurfaced	" 473 "	-----	-----
Urban streets and alleys	" 194 "	-----	-----
High-type surface	" 162 "	146	16
Low-type surfaced and unsurfaced	" 32 "	-----	-----

	Number or Amount	New Construction	Improvements
HIGHWAYS, ROADS AND STREETS (cont'd)			
Other roads (in parks, etc) (Total)	122 miles	---	---
High-type surfaces "	76 "	49	27
Low-type surfaced or unsurfaced	46 "	---	---
Bridges and Viaducts "	196	96	100
Wood bridges and viaducts	156	71	85
Stall bridges and viaducts	22	7	15
Masonry bridges and viaducts	18	18	0
Culverts	3751	3613	138
Road Drainage "	198 miles	125	73
Ditch	187 "	115	72
Pipe	11 "	10	1
Sidewalks and paths "	162 "	145	17
Paved sidewalks and paths	157 "	140	17
Unpaved sidewalks and paths	5 "	5	0
Curbs	218 "	203	15
Gutters	240 "	219	21
Road and Street Lighting	---	---	---
Number of light stands	110	51	59
Miles of road equipped	6 miles	5	1
Guard rails and guard walls	8 "	7	1
Traffic signs erected	3650	---	---
Roadside landscaping	459 miles	0	459
PUBLIC BUILDINGS (excluding Utility Plants & Airport Bldgs.)			
Public buildings (total)	1254	163	1191
Educational buildings "	487	14	473
Libraries	27	1	26
Schools	460	13	447
Recreational buildings "	52	28	24
Auditoriums	7	3	4
Gymnasiums	1	0	1
Other recreational bldgs.	44	25	19

	Number or Amount	New Construction	Improvements
PUBLIC BUILDINGS (cont'd)			
Office and administrative bldgs.	57	9	48
Hospitals	15	0	15
Penal institutions	4	0	4
Dormitories	55	2	53
Fire houses	70	3	67
Garages	43	9	34
Storage buildings	148	15	133
Armories	19	5	14
Barns and stables	56	36	20
Other Public buildings	348	42	306
Number of buildings demolished	61	---	---
OUTDOOR RECREATIONAL FACILITIES			
Stadiums, grandstands and bleachers	24	20	4
Fairgrounds and rodeo grounds	1	1	1
Parks	53	13	40
Playgrounds (Total)	112	13	99
School playgrounds	96	3	93
Other playgrounds	16	10	6
Athletic fields	214	159	55
Horseshoe courts	4	4	0
Tennis courts	73	28	45
Swimming pools	2	2	0
Wading pools	3	3	0
Ice Skating area	(64,000 sq. ft.)	1	---
Band shells	3	1	2
Outdoor theaters	1	1	0
Golf courses	8	4	4

	Number or Amount	New Construction	Improvements
PUBLIC UTILITIES AND SANITATION			
Utility Plants (total)	19	13	6
Electric power plants	1	0	1
Incinerator plants	2	1	1
Pumping stations	4	2	2
Sewage treatment plants	11	10	1
Water treatment plants	1	0	1
Water mains and distribution lines	111 miles	98	13
Water consumer connections	4077	3448	629
Water wells	3	3	0
Storage tanks, reservoirs, etc.	15	11	4
Storage dams	1	1	0
Storm and sanitary sewers	157 miles	152	5
Sewerage service connections	6007	5610	397
Manholes and catch basins	5176	4761	415
Sanitary privies	11637	11544	93
Sealing abandoned mines	2734	2734	0
Mosquito control (acres drained)	30	30	0
Telephone and telegraph lines	14 miles	14	0
Police, fire-alarm and traffic signals	9 (miles of line)	9	0
Electric power lines	29 miles	28	1
Flood lighting athletic fields, parking lots, etc.	4	4	0
Pipe lines (other than water and sewer)	2 miles	1	1
FLOOD AND EROSION CONTROL, IRRIGATION AND CONSERVATION			
Fish hatcheries	5	4	1
Firebreaks	111 miles	111	0
Oysters (planting-bushels)	167,289	167,289	0
Levees and embankments	7,171 lin. ft.	7,171	0
Jetties and breakwaters	788 " "	788	0

	Number or Amount	New Construction	Improvements
FLOOD AND EROSION CONTROL, IRRIGATION AND CONSERVATION (cont'd)			
Bulkheads	24,988 lin. ft.	22,168	2,820
Retaining walls and revetments	116,932 " "	105,443	11,489
Riprap (square yards of surface)	26,391	25,986	405
River bank and shore improvement	9 miles	0	9
Stream bed improvement	22 "	0	22
Conservation, Flood and Erosion Control Dams	4	4	0
Diversion Dams	1	1	0
Other Dams	3	3	0
AIRPORT AND AIRWAY FACILITIES			
Airport and landing areas (total)	3	1	2
Military, Naval and Coast Guard Landing areas	1	0	1
Commercial airports	2	1	1
Airport Facilities			
Landing fields	2	1	1
Runways (total)	4810 ft.	4810	0
High type surface	4810 ft.	4810	0
Airport buildings (total)	21	2	19
Administration terminal	2	1	1
Hangars	5	1	4
Other airport buildings	14	0	14
Taxi strips (total)	1600 lin. ft.	1600	0
High-type surface	1600 " "	1600	0
Airport drainage	9192 " "	9192	0
Pipe drain	8692 " "	8692	0
French drain	500 " "	500	0
Landing areas flood-lighted	2	1	1
Boundary lights (number of light standards)	54	54	0
Airway markers	116	116	0
Airway beacons	1	0	1

	Number or Amount	New Construction	Improvements
MISCELLANEOUS ITEMS			
Cemeteries	1	0	1
Landscaping and beautification other than roadside and in parks, etc.	1217 acres	0	1217
Ornamental pools and fountains	5	5	0
Monuments and historic markers	1	1	0
Drainage (other than road, airport, or mosquito control)	172,171	971	171,200
Fencing	77 miles	42	35
Tunnels	2	2	0
Docks, wharves and piers	30	13	17
Artificial channels other than irrigation drainage	1 mile	1	0

The Works Progress Administration was created May 6, 1935, and was continued by the Emergency Relief Appropriation Acts of 1936, 1937 and 1938. The name of the Works Progress Administration was changed in July 1939 to Work Projects Administration by the Reorganization Plan No. 1. The FERA Act of 1939 extended the Work Projects Administration until June 30, 1940.

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND, BY COUNTY
(Accumulative as of June 30, 1940)

Type of Project	ALLEGANY COUNTY			ANNE ARUNDEL COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Primary Roads	.....	.....	.....	237;017	111;462	348;479
Secondary Roads and Feeders	1,451;435	372;863	1;824;298	141;643	66;035	207;678
Streets and Alleys	946;625	265;752	1,212;377	86;121	57;669	143;790
Other Highways, Roads, and Streets	124,843	78,853	203,696	258,300	89,291	347,591
Totals	2,522,903	717,468	3,240,371	723,081	324,457	1,047,538
PUBLIC BUILDINGS						
Educational Buildings	1;363	770	2;133	.....	.....	.....
Other Buildings	23,808	6,734	30,542	115,484	78,572	194,056
Totals	25,171	7,504	32,675	115,484	78,572	194,056
RECREATIONAL FACILITIES, EXCEPT BLDGS.	433,384	135,700	569,084	.....	.....	.....
PUBLIC UTILITIES						
Water Purification and Supply	318;238	175;748	493;986	32;807	58;686	91;493
Sewage Collection and Disposal	279,811	63,175	342,986	122,334	65,394	187,728
Totals	598,049	238,923	836,972	155,141	124,080	279,221
CONSERVATION						
Land and Water Conservation	182;439	43;438	255;877	19;525	3,440	22;965
Other Conservation	3,699	1,733	5,432	.....	.....	.....
Totals	186,138	45,171	261,309	19,525	3,440	22,965
SANITATION	201,182	108,036	309,218	8,018	10,970	18,988
OTHER OPERATIONS	10,227	5,644	15,871	258,613	118,918	377,531
County Totals	3,977,054	1,258,446	5,235,500	1,279,862	660,437	1,940,299

(continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	BALTIMORE COUNTY			BALTIMORE CITY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Primary Roads	638,146	278,575	916,721	.....	.....	.....
Secondary Roads and Feeders	311,106	167,185	478,291	.....	.....	.....
Streets and Alleys	6,415	1,890	8,305	5,970,944	958,644	6,929,588
Other Highways, Roads, and Streets	114,749	46,269	161,018	1,325,803	262,095	1,587,898
Totals	1,070,416	493,919	1,564,335	7,296,747	1,220,739	8,517,486
PUBLIC BUILDINGS						
Educational Buildings	.....	.....	.....	2,077,928	518,371	2,596,299
Other Buildings	370,942	21,723	392,665	1,006,621	128,208	1,134,829
Totals	370,942	21,723	392,665	3,084,549	646,579	3,731,128
RECREATIONAL FACILITIES EXCEPT BLDGS.	.....	.....	.....	2,333,081	351,698	2,684,779
PUBLIC UTILITIES						
Water Purification and Supply	174,779	51,237	226,016	994,610	124,128	1,118,738
Sewage Collection and Disposal	10,641	3,423	14,064	2,515,863	254,250	2,770,113
Other Utilities	.....	.....	.....	901,183	96,277	997,460
TOtals	185,420	54,660	240,080	4,411,656	474,655	4,886,311
AIRPORTS AND AIRWAYS	9,763	1,654	11,417	394,330	29,268	423,598
CONSERVATION						
Land and Water Conservation	467	2,060	2,527	36,897	4,317	41,214
Other Conservation	51,627	.....	51,627	5,933	.....	5,933
Totals	52,094	2,060	54,154	42,830	4,317	47,147
SANITATION	5,554	6,603	12,157	43,964	48,899	92,863
OTHER OPERATIONS DIV. PROJECTS	135,919	46,749	182,668	1,278,283	308,188	1,586,471
County Totals	1,830,108	627,368	2,457,476	18,885,440	3,084,343	21,969,783

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	CALVERT COUNTY			CAROLINE COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	13,269	6,169	19,438	.....	.....	.....
Streets and Alleys	.....	.....	.....	4,977	414	5,391
Other Highways, Roads, and Streets	.....	.....	.....	22,059	7,330	29,389
Totals	13,269	6,169	19,438	27,036	7,744	34,780
PUBLIC BUILDINGS						
Educational Buildings	6,675	1,139	7,814	56,175	38,311	94,486
Other Buildings	.....	.....	.....	12,078	9,380	21,458
Totals	6,675	1,139	7,814	68,253	47,691	115,944
RECREATIONAL FACILITIES, EXCEPT BLDGS.	.....	.....	.....	65,116	21,825	86,941
PUBLIC UTILITIES	.....	.....	.....			
Water Purification and Supply	.....	.....	.....	2,411	8,347	10,758
Sewage Collection and Disposal	.....	.....	.....	4,793	1,874	6,667
Totals	.....	.....	.....	7,204	10,221	17,425
CONSERVATION		.....				
Land and Water Conservation	652	.....	652	16,242	.....	16,242
SANITATION	6,278	8,014	14,292	13,658	18,241	31,899
OTHER OPERATIONS	.....	.....	.....	3,786	1,529	5,315
County Totals	26,874	15,322	42,196	201,295	107,251	308,546

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	CARROLL COUNTY			CECIL COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	99,449	18,714	118,163	32,652	11,000	43,652
Streets and Alleys	36,841	20,769	57,610	.....	.....	.....
Other Highways, Roads, and Streets	.....	.....	.....	11,053	9,182	20,235
Totals	136,290	39,483	175,773	43,705	20,182	63,887
PUBLIC BUILDINGS						
Educational Buildings	.....	.....	.....	11,761	15,897	27,658
Other Buildings	29,166	9,525	38,691	5,567	364	5,931
Totals	29,166	9,525	38,691	17,328	16,261	33,589
RECREATIONAL FACILITIES, EXCEPT BLDGS.	22,047	6,113	28,160	29,205	6,739	35,944
PUBLIC UTILITIES						
Water Purification and Supply	1,314	.....	1,314	18,997	6,620	25,617
Sewage Collection and Disposal	4,506	1,464	5,970	82,961	60,483	143,444
Totals	5,820	1,464	7,284	101,958	67,103	169,061
CONSERVATION						
Land and Water Conservation	.....	.....	.....	150	.....	150
Other Conservation	.....	.....	.....	2,072	2,529	4,601
Totals	.....	.....	.....	2,222	2,529	4,751
OTHER OPERATIONS	530	120	650	.....	.....	.....
County Totals	193,853	56,705	250,558	194,418	112,814	307,232

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	CHARLES COUNTY			DORCHESTER COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	58,755	32,777	91,532	24,112	20,128	44,240
Streets and Alleys	20,572	14,173	34,745	10,195	4,217	14,412
Totals	79,327	46,950	126,277	34,307	24,345	58,652
PUBLIC BUILDINGS						
Educational Buildings	.....	.....	.....	9,012	4,525	13,537
Other Buildings	868	320	1,188	1,574	596	2,170
Totals	868	320	1,188	10,586	5,121	15,707
PUBLIC UTILITIES						
Sewage Collection and Disposal	22,614	11,849	34,463	56,756	25,785	82,541
Other Utilities	.....	.....	.....	1,439	91	1,530
Totals	22,614	11,849	34,463	58,195	25,876	84,071
CONSERVATION						
Land and Water Conservation	.....	.....	.....	57,188	9,431	66,619
Other Conservation	.....	.....	.....	29,546	4,090	33,636
Totals	.....	.....	.....	86,734	13,521	100,255
SANITATION	6,197	5,700	11,897	.....	.....	.....
County Totals	109,006	64,819	173,825	189,822	68,863	258,685

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Types of Project	FREDERICK COUNTY			GARRETT COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	388,023	99,677	487,700	719,920	174,586	894,506
Streets and Alleys	139,261	49,748	189,009	19,927	2,889	22,816
Other Highways, Roads, and Streets	72,555	43,571	116,126	.....	.....	.....
Totals	599,839	192,996	792,835	739,847	177,475	917,322
PUBLIC BUILDINGS						
Other Buildings	33,851	13,402	47,253	1,723	68	1,791
RECREATIONAL FACILITIES, EXCEPT BLDGS.	95,132	19,951	115,083	17,701	6,279	23,980
PUBLIC UTILITIES						
Water Purification and Supply	70,681	26,991	97,672	2,867	975	3,842
Sewage Collection and Disposal	518,569	186,124	704,693	17,208	1,248	18,456
Other Utilities	235	69	304	.....	.....	.....
Totals	589,485	213,184	802,669	20,075	2,223	22,298
CONSERVATION		.....				
Land and Water Conservation	4,271	.....	4,271	297,564	215,412	512,976
Other Conservation	34,541	8,584	43,125	7,479	1,098	8,577
Totals	38,812	8,584	47,396	305,043	216,510	521,553
SANITATION	25,056	20,961	46,017	55,190	5,279	60,469
ENGINEERING SURVEYS	.....	.....	.....	80,000	19,885	99,885
County Totals	1,382,175	469,078	1,851,253	1,219,579	427,719	1,647,298

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	HARFORD COUNTY			HOWARD COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Primary Roads	63,228	61,744	124,972	7,475	9,803	17,278
Secondary Roads and Feeders	144,479	192,931	337,410	.....	.....	.....
Streets and Alleys	8,102	7,517	15,619	4,251	529	4,780
Other Highways, Roads, and Streets	64,556	74,492	139,048	34,103	5,787	39,890
Totals	280,365	336,684	617,049	45,829	16,119	61,948
PUBLIC BUILDINGS						
Educational Buildings	.....	.....	.....	8,195	3,274	11,469
Other Buildings	76,732	9,103	85,835	13,178	2,111	15,289
Totals	76,732	9,103	85,835	21,373	5,385	26,758
RECREATIONAL FACILITIES, EXCEPT BLDGS.	19,432	14,237	33,669	.....	.....	.....
PUBLIC UTILITIES				.....	.....	.....
Water Purification and Supply	20,239	10,002	30,241	.....	.....	.....
Sewage Collection and Disposal	7,418	6,877	14,295	3,372	1,064	4,436
Totals	27,657	16,879	44,536	3,372	1,064	4,436
OTHER OPERATIONS	439,536	134,696	574,232	.....	.....	.....
County Totals	843,722	511,599	1,355,321	70,574	22,568	93,142

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	KENT COUNTY			MONTGOMERY COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	6,646	8,740	15,386	16,072	2,552	18,624
Streets and Alleys	11,249	14,844	26,093	5,514	3,416	8,930
Other Highways, Roads, and Streets	10,093	4,401	14,494	.....	.....	.....
Totals	27,988	27,985	55,973	21,586	5,968	27,554
PUBLIC BUILDINGS						
Educational Buildings	9,085	4,335	13,420	6,729	3,418	10,147
Other Buildings	16,776	38,200	54,976	313	132	445
Totals	25,861	42,535	68,396	7,042	3,550	10,592
RECREATIONAL FACILITIES, EXCEPT BLDGS.	.....	.....	.....	25,092	5,910	31,002
PUBLIC UTILITIES	.....	.....	.....			
Water Purification and Supply	.....	.....	.....	5,105	570	5,675
Sewage Collection and Disposal	.....	.....	.....	10,737	4,844	15,581
Totals	.....	.....	.....	15,842	5,414	21,256
SANITATION	8,689	9,148	17,837	6,534	5,065	11,599
County Totals	62,538	79,668	142,206	76,096	25,907	102,003

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	PRINCE GEORGE COUNTY			QUEEN ANNE COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Primary Roads	.....	.....	.....	6,054	3,147	9,201
Secondary Roads and Feeders	57,847	17,176	75,023	46,886	14,505	61,391
Streets and Alleys	4,396	185	4,581	4,893	2,304	7,197
Other Highways, Roads, and Streets	80,949	52,441	133,390	4,713	1,909	6,622
Totals	143,192	69,802	212,994	62,546	21,865	84,411
PUBLIC BUILDINGS						
Educational Buildings	184,124	75,997	260,121	60,204	94,717	154,921
Other Buildings	134,879	46,221	181,100	3,968	745	4,713
Totals	319,003	122,218	441,221	64,172	95,462	159,634
RECREATIONAL FACILITIES, EXCEPT BLDGS.	3,721	1,065	4,786	2,930	395	3,325
PUBLIC UTILITIES						
Water Purification and Supply	9,933	3,801	13,734	756	472	1,228
Sewage Collection and Disposal	27,074	14,665	41,739	2,652	936	3,588
Other Utilities	1,511	1,159	2,670	.....	.....	.....
Totals	38,518	19,625	58,143	3,408	1,408	4,816
SANITATION	996	403	1,399	.....	.....	.....
OTHER OPERATIONS	29,748	33,652	63,400	2,597	.....	2,597
County Totals	535,178	246,765	781,943	135,653	119,130	254,783

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	ST. MARY'S COUNTY			SOMERSET COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	23,860	3,727	27,587	73,129	9,298	82,427
Streets and Alleys	.....	.....	.....	29,058	11,510	40,568
Other Highways, Roads, and Streets	4,818	1,212	6,030	18,531	8,041	26,572
Totals	28,678	4,939	33,617	120,718	28,849	149,567
PUBLIC BUILDINGS						
Educational Buildings	11,516	12,825	24,341	97,240	98,493	195,733
Other Buildings	2,989	6,411	16,400	6,004	125	6,128
Totals	21,505	19,236	40,741	103,244	98,618	201,861
RECREATIONAL FACILITIES, EXCEPT BLDGS.	.....	.....	.....	4,420	1,358	5,778
PUBLIC UTILITIES	.....	.....	.....			
Water Purification and Supply	.....	.....	.....	3,431	6,147	9,578
Sewage Collection and Disposal	41,125	17,001	58,126	.....	.....	.....
Totals	41,125	17,001	58,126	3,431	6,147	9,578
CONSERVATION						
Other Conservation	734	151	885	4,469	5,716	10,185
SANITATION	8,215	8,177	16,392	27,841	27,103	54,944
OTHER OPERATIONS	.....	.....	.....	2,192	739	2,931
County Totals	100,257	49,504	149,761	266,315	168,530	434,845

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Types of Project	TALBOT COUNTY			WASHINGTON COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	.....	.....	.....	1,095;919	250;742	1,346;661
Streets and Alleys	2,441	2,452	4,893	390;324	105;664	495;988
Other Highways and Roads, Streets	.....	.....	.....	249,215	51,350	300,565
Totals	2,441	2,452	4,893	1,735,458	407,756	2,143,214
PUBLIC BUILDINGS						
Educational Buildings	22;455	6;817	29;272	50;426	12;463	62;889
Other Buildings	5,676	.....	5,676	579,559	138,064	717,623
Totals	28,131	6,817	34,948	629,985	150,527	780,512
RECREATIONAL FACILITIES, EXCEPT BLDGS.	.....	.....	.....	193,138	48,340	241,478
PUBLIC UTILITIES	.....	.....	.....			
Water Purification and Supply	.....	.....	.....	58;069	39;799	97;868
Sewage Collection and Disposal	6,352	3,356	9,708	252;134	86;501	338;635
Other Utilities	.....	.....	.....	1,805	.....	1,805
Totals	6,352	3,356	9,708	312,008	126,300	438,308
AIRPORTS AND AIRWAYS	.....	.....	.....	135,276	30,235	165,511
CONSERVATION	.....	.....	.....		.....	
Land and Water Conservation	.....	.....	.....	8;836	.....	8;836
Other Conservation	.....	.....	.....	15,663	3,524	19,187
Totals	.....	.....	.....	24,499	3,524	28,023
SANITATION	.....	.....	.....	35,459	24,972	60,431
OTHER OPERATIONS	.....	.....	.....	32,611	3,294	35,905
County Totals	36,924	12,625	49,549	3,098,434	794,948	3,893,382

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	WICOMICO COUNTY			WORCESTER COUNTY		
	Federal	Sponsor	Total Federal and Sponsor	Federal	Sponsor	Total Federal and Sponsor
HIGHWAYS						
Secondary Roads and Feeders	109,037	24,637	133,674	118,710	76,894	195,604
Streets and Alleys	90,583	71,877	162,460	4,338	7,049	11,387
Other Highways, Roads and Streets	61,141	49,476	110,617	24,710	16,209	40,919
Totals	260,761	145,990	406,751	147,758	100,152	247,910
PUBLIC BUILDINGS						
Educational Buildings	19,011	6,692	25,703	34,495	33,856	68,351
Other Buildings	17,724	9,235	26,959	24,772	22,372	47,144
Totals	36,735	15,927	52,662	59,267	56,228	115,495
RECREATIONAL FACILITIES EXCEPT BLDGS.	96,984	19,260	116,244	44,868	8,611	53,479
PUBLIC UTILITIES						
Water Purification and Supply	9,959	22,100	32,059	2,271	1,944	4,215
Sewage Collection and Disposal	133,440	101,248	234,688	11,138	6,248	17,386
Totals	143,399	123,348	266,747	13,409	8,192	21,601
CONSERVATION						
Land and Water Conservation	115,038	10,878	125,916	16,765	921	17,686
Other Conservation	3,679	1,330	5,009	.....	.....	.....
Totals	118,717	12,208	130,925	16,765	921	17,686
SANITATION	24,274	25,583	49,857	4,962	4,404	9,366
OTHER OPERATIONS	11,489	3,239	14,728	.....	.....	.....
County Totals	692,359	345,555	1,037,914	287,029	178,508	465,537

(Continued)

TYPES AND COST OF PROJECTS SPONSORED BY THE
WORK PROJECTS ADMINISTRATION IN MARYLAND
(Accumulative as of June 30, 1940)

Type of Project	Federal	Sponsor	Grand Total Federal and Sponsor
HIGHWAYS			
Other Highways, Roads, and Streets	371,294	139,727	511,021
PUBLIC BUILDINGS		.....	
Other Buildings	2,296	.....	2,296
AIRPORTS AND AIRWAYS	8,100	.....	8,100
CONSERVATION		.. ....	
Other Conservation	9,754	.....	9,754
SANITATION	18,233	11,657	29,890
OTHER OPERATIONS	6,636	1,001	7,637
County Totals	416,313	152,385	568,698
Grand Total for State	36,110,885	9,66 0,861	45,771,746

F E D E R A L W O R K S A G E N C Y

PUBLIC WORKS ADMINISTRATION

The enlarged public works program of the Federal government was begun with the enactment of the National Industrial Recovery Act of 1933, as a result of the large amount of unemployment prevalent throughout the country, particularly in the construction industry and its many allied fields.

During the first half of 1933, virtually no new construction had been undertaken by private organizations. Although the government had increased its public works program, the total volume of contracts in the United States for the first six months of 1933 was only 14% of that in the corresponding period of 1932. This low volume of construction was the culmination of five years of drastic curtailments in new construction. People employed in the building trades, and related industries found themselves in a market which could realize no profit in the use of their various skills. At this time, the comparative level of construction was lower than for any other major industry in the United States. In the first half of 1933, factories producing durable goods employed only 44% as many people as they had in 1929, lumber mills but 45% of their 1929 force, cement mills 44% and steel mills 54% for the same year.

The original act, which created the Federal Emergency Administration of Public Works*, provided a total appropriation of $3,300,000,000 to be allocated for the construction of various kinds of public works and public relief projects. Later legislation augmented these funds

* Created June 1933; functions and personnel transferred to Federal Works Agency as the Public Works Administration by order of Reorganization Plan No. 1, effective July 1, 1939.

and extended the life of the Public Works Administration to June 30, 1941.

The Public Works program which was begun in 1933 was undertaken in three major categories: (1) projects conducted directly by agencies of the Federal government, identified as Federal projects; (2) projects known as non-Federal projects and undertaken by State and local authorities or other non-Federal bodies in cooperation with the Federal government; and (3) loans to industry on a commercial basis for such purposes as the development and improvement of railroad facilities.

State and local authorities which participated in the non-Federal public works program, provided for the greater portion of the project cost as the Public Works Administration was limited in its grants to 30% of the total cost of labor and materials. Later, the maximum grant was raised to 45% of the total project cost. The State or local sponsoring agency financed directly or by loans from the P.W.A. the remaining 70% or 55%, respectively.

All public works were required to have specific social and economic value, and the construction of which was purported to relieve unemployment. Classes of non-Federal projects preferred for grants by the P.W.A. included waterworks, sewer projects, sewage disposal projects, municipal power plants, highways, bridges, tunnels, public schools, and hospitals.

Six hundred public works projects were aided by the Public Works Administration in Maryland, entailing a total expenditure of $125,388,453. The Federal program provided for 458 projects with allotments totalling $35,795,562, and the non-Federal program provided for 142 projects with a total estimated cost of $89,592,811.

Federal Program

Under the Federal public works program, as differentiated from the non-Federal program, buildings of various kinds constituted the largest

classification of projects to receive Federal allotments by the Public Works Administration in Maryland. One hundred and ninety two of these projects included post offices, educational buildings, and others, the allotments totalling $16,280,375. Allotments for aviation aids amounted to $6,704,013.

The Public Roads Administration of the Federal Works Agency, received allotments from the Public Works Administration which were used in cooperation with the state highway departments for the construction and improvement of roads and highways. More than 1,689,250 man-hours of work on state highways and roads were provided through these means. (see chapter on Public Roads Administration)

The Department of Agriculture spent approximately $3,264,380 for repairs and improvements to the agricultural facilities at the Beltsville Research Center. The War Department has similarly provided improvements and facilities at the Aberdeen Proving Grounds through the expenditure of $2,948,512. The Navy Department provided improvements at Annapolis through the expenditure of $1,799,057 of P.W.A. funds. The Coast Guard of the Treasury Department provided repairs to a number of cutters at Curtis Bay from allotments totalling $1,248,216.

The Procurement Division of the Treasury Department (Bureau of Buildings) spent $100,455 for the construction of a new post office at Chestertown; $53,821 for the construction of a quarantine station in Baltimore; $349,926 for a structure at College Park to house a mining experiment for research work in mineral technology and $63,427 for a post office at Easton.

Non-Federal Program

Outstanding among the non-Federal P.W.A. programs in Maryland is the construction of two bridges which, it is estimated, cost $9,762,450.

The Susquehanna Bridge, 5,074 feet long with a 46 foot roadway and a sidewalk two and a half feet wide on each side, was completed at an estimated cost of $4,535,850. The Potomac Bridge, 9,620 feet in length with a main span clearance of 135 feet above mean highwater, was completed at an estimated cost of $5,226,600.

A P. W. A. grant for municipal improvements in Baltimore City in the sum of $9,258,937 made possible the completion of the municipal airport, an additional wing to the art museum, a new Eastern High School building, additional to other public school buildings and three highway bridges in the city. It also aided in paving, widening and extending streets and made possible improvements to the City 's water supply and sewerage systems. This multiple unit project, it is estimated, will cost in excess of $21,046,996 when completed.

The P. W. A., through loans and grants, financed thirty projects for the construction of and improvement to other sewerage systems throughout the State at an estimated cost of $8,301,954. This includes a grant of $452,295 for construction of a complete sewerage system at Frederick, Maryland estimated to cost $1,027,432.

Forty-one educational projects costing $15,295,530 were constructed with the aid of P. W. A. loans totaling $305,250 and grants of $5,936,363. This group includes the construction of a high school building at Cumberland, containg twenty-six classrooms. A grant of $247,716 was made for this project, which was estimated to cost $896,771.

Employment benefits derived from the above allotments are shown in the attached summary giving the man-hours expended in the construction of this huge State program from its inception to July 1, 1939. This site employment was spread generally throughout the State, although the allotments for Baltimore City provided relief for the relatively larger proportion of unemployed there. Site employment reached a peak in August 1934, when 12,537 men were provided employment through the expenditure of $2,240,144.

PUBLIC WORKS ADMINISTRATION NON FEDERAL PROJECTS IN MARYLAND
(Accumulative as of January 3, 1940)

Counties	Type of Project	Grant	Sponsor's Contribution	Total Cost Of Project
ALLEGANY COUNTY				
Cumberland-Frostburg	Schools	$ 582,951	$ 712,497	$ 1,295,448
Cumberland	Schools	247,716	649,055	896,771
Cumberland	Sewers	135,988	340,376	476,364
Frostburg	Waterworks	24,598	68,654	93,252
Cumberland	Waterworks	8,100	10,938	19,038
Cumberland	Waterworks	16,744	20,465	37,209
Total		$1,016,097	$1,801,985	$ 2,818,082
ANNE ARUNDEL COUNTY				
Annapolis	Sewers	$ 210,457	$ 706,522	$ 916,979
Crownsville	Hospital Addition	56,098	100,635	156,733
Crownsville	Waterworks Improvement	7,400	19,936	27,336
Annapolis	Record Building	60,252	152,528	212,780
Glen Burnie	Sewers	68,817	45,208	114,025
Shipley	Fire Department	13,711	16,760	30,471
Tydings-on-Bay	Bulkhead	12,273	19,495	31,768
County-Wide	Sanitary Sewers	10,832	33,483	44,315
"	Schools	97,088	120,568	217,656
"	Soil Erosion	59,577	74,349	133,926
"	Schools	157,500	196,785	354,285
Total		$ 754,005	$1,486,269	$ 2,240,274
BALTIMORE COUNTY				
Owings Mills	Dormitory	$ 34,000	$ 99,902	$ 133,902
Owings Mills	Dormitory	162,000	199,101	361,101
Catonsville	Hospital	108,000	179,341	287,341
Catonsville	Hospital Addition	20,250	25,164	45,414
Pikesville	Infirmary	79,494	97,162	176,656
Woodensburg	School Addition	28,044	35,567	63,581
Chase	School	56,560	69,131	125,691
County-Wide	Schools	44,590	114,094	158,684
"	Schools	28,297	34,586	62,883
"	Waterworks Sewerage	502,895	614,649	1,117,544
"	Waterworks Sewerage	250,000	312,754	562,754
Total		$1,314,100	$1,781,451	$ 3,095,551

Counties	Type of Project	Grant	Sponsor's Contribution	Total Cost Of Project
CALVERT COUNTY				
Chesapeake Beach	Bulkhead	$ 24,305	$ 29,706	$ 54,011
Chesapeake Beach	---	34,291	42,612	76,903
Total		$ 58,596	$ 72,318	$ 130,914
CAROLINE COUNTY				
Hillsboro-Denton				
Federalsburg	School Addition	$ 78,042	$ 96,536	$ 174,578
Greensboro	School	22,776	28,640	51,416
Total		$ 100,818	$ 125,176	$ 225,994
CARROLL COUNTY				
Westminster	Disposal Plant	$ 63,439	$ 211,311	$ 274,750
Sykesville	Dormitory	35,608	89,018	124,626
Henryville	Hospital Addition	78,210	95,590	173,800
Sykesville	Hospital	153,104	192,343	345,447
Hampstead	Waterworks	21,786	27,015	48,801
County-Wide	Schools	184,801	226,636	411,437
Total		$ 536,948	$ 841,913	$ 1,378,861
CECIL COUNTY				
Elkton	Courthouse, Jail	$ 158,782	$ 194,068	$ 352,850
Elkton	High School	81,000	147,295	228,29
Chesapeake City	Waterworks	27,476	35,929	63,405
County-Wide	Schools	170,672	208,600	379,272
Total		$ 437,930	$ 585,892	$ 1,023,822
CHARLES COUNTY				
Charles County	ighway, Bridge	$ 2,351,970	$ 2,874,630	$ 5,226,600
Total		$ 2,351,970	$ 2,874,630	$ 5,226,600
DORCHESTER COUNTY				
Cambridge	Disposal Plant	$ 54,300	$ 192,084	$ 246,384
Cambridge	Disposal Plant	49,305	60,262	109,567
Cambridge	Hospital	72,450	101,687	174,137
Vienna	Waterworks, Sewerage	8,440	23,000	31,440
Hurlock	Sewerage	16,074	47,879	63,953
Secretary	Waterworks	6,256	16,417	22,673
Cambridge	Municipal Improvements	17,306	21,783	39,089

Counties	Type of Project	Grant	Sponsor's Contribution	Total Cost Of Project
DORCHESTER COUNTY (cont'd)				
Cambridge	High School	$ 77,454	$ 97,384	$ 174,838
Cambridge	Library	9,000	11,000	20,000
Cambridge	High School	81,000	99,997	180,997
County-Wide	Schools	180,912	221,115	402,027
"	Municipal Buildings	52,020	73,740	125,760
Total		$ 624,517	$ 966,348	$1,590,865
FREDERICK COUNTY				
Point of Rocks	Schools	$ 11,413	$ 14,696	$ 26,109
County-Wide	Disposal Plant	452,295	602,021	1,054,31
"	Fire Department	16,155	22,885	39,040
"	Schools	245,250	299,750	545,000
Total		$ 725,113	$ 939,352	$1,664,465
GARRETT COUNTY				
Grantsville	School Addition	$ 36,567	$ 46,442	$ 83,009
Grantsville	Waterworks	10,326	27,675	38,001
Oakland	School Addition	38,492	47,046	85,538
Total		$ 85,385	$ 121,163	$ 206, 48
HARFORD COUNTY				
Belair	Disposal Plant	$ 42,354	$ 115,648	$ 158,002
Havre de Grace	Municipal Improvements	39,739	48,570	88,309
County-Wide	Highway, School	81,000	110,392	191,392
Total		$ 163,093	$ 274,610	$ 437,703
HOWARD COUNTY				
Ellicott City	Courthouse	$ 19,102	$ 23,991	$ 43,093
Ellicott City	Fire Department	17,123	21,064	38,187
Elkridge	High School	33,750	50,232	83,982
Scaggsville	School	25,635	31,879	57,514
County-Wide	Schools	110,250	136,598	246,848
Total		$ 205,860	$ 263,764	$ 469,624
KENT COUNTY				
Chestertown	Disposal Plant	$ 30,630	$ 37,438	$ 68,068
Total		$ 30,630	$ 37,438	$ 68,068

Counties	Type of Project	Grant	Sponsor's Contribution	Total Cost Of Project
MONTGOMERY COUNTY				
Rockville	Disposal Plant	$ 26,473	$ 32,357	$ 58,830
Glen Echo	Fire Department	6,558	16,912	23,470
Glen Echo	Streets	6,200	16,324	22,524
Rockville-Damascus-Silver Springs-Sandy Springs	Schools	191,800	526,534	718,334
Chevy Chase	Paving	23,410	28,730	52,140
County-Wide	Schools	189,510	246,979	436,489
"	Schools	160,000	546,815	706,815
"	Waterworks Improvement	67,658	82,694	150,352
Total		$ 671,609	$1,497,345	$2,168,954
PRINCE GEORGE'S COUNTY				
Cottage City	Streets	$ 18,895	$ 56,807	$ 75,702
Hyattsville	Streets	26,224	32,604	58,828
Colmar Manor	Streets	45,000	61,132	106,132
Hyattsville	Street Improvement	49,452	60,442	109,894
Riverdale	Streets	45,858	56,050	101,908
Cheverly	Street Improvement	43,282	52,901	96,183
College Park	University Building	1,086,014	1,347,350	2,433,364
College Park	University Building	156,962	389,585	546,547
Riverdale	Municipal Improvements	17,911	21,892	39,803
Bowie	School Additions	131,144	160,711	291,855
Cottage City	Municipal Improvement	14,710	17,978	32,688
Bladensburg	Incinerator	24,750	30,250	55,000
Bowie	Municipal Improvement	2,830	3,690	6,520
Hyattsville	Sewer	16,556	20,234	36,790
Hyattsville	Municipal Improvement	157,500	221,649	379,149
Upper Marlboro	Waterworks	15,750	19,316	35,066
County-Wide	Schools	185,072	237,575	422,647
"	Sanitary Sewerage	526,500	643,500	1,170,000
"	Schools	102,750	394,035	496,785
"	School Improvements	100,000	126,103	226,103
"	School Improvements	52,000	66,900	118,900
Total		$ 2,819,160	$ 4,020,704	$ 6,839,864

Counties	Type of Project	Grant	Sponsor's Contribution	Total Cost Of Project
QUEEN ANNE'S COUNTY				
Centerville	Disposal Plant	$ 9,725	$ 24,271	$ 33,996
Total		$ 9,725	$ 24,271	$ 33,996
ST. MARY'S COUNTY				
Helen	School Improvements	$ 14,489	$ 17,710	$ 32,199
Total		$ 14,489	$ 17,710	$ 32,199
SOMERSET COUNTY				
Crisfield	Sanitary Sewers	$ 56,581	$ 72,051	$ 128,632
Total		$ 56,581	$ 72,051	$ 128,632
TALBOT COUNTY				
Trappe	Water mains	$ 1,046	$ 2,545	$ 3,591
Easton	Disposal Plant	50,625	61,875	112,500
Easton	Electric Distributions	37,710	46,090	83,800
Total		$ 89,381	$ 110,510	$ 199,891
WASHINGTON COUNTY				
Hagerstown	City Hall	$ 186,750	$ 228,250	$ 415,000
Hagerstown	Disposal Plant	36,171	44,209	80,380
Clear Springs	Waterworks	6,995	19,607	26,602
Williamsport	Sanitary Sewers	18,816	51,780	70,596
Hagerstown	Storm Sewers	68,451	92,006	160,457
Hagerstown	Municipal Improvement	6,118	7,477	13,595
County-Wide	Schools	130,948	160,047	290,995
Total		$ 454,249	$ 603,376	$ 1,057,625
WICOMICO COUNTY				
Salisbury	Street Improvement	$ 41,657	$ 50,914	$ 92,571
Salisbury	Waterworks, Sewerage	30,000	107,459	137,459
Sharptown	Waterworks	20,076	25,108	45,184
County-Wide	School Addition	301,598	369,655	671,253
"	Courthouse	76,950	123,384	200,334
Total		$ 470,281	$ 676,520	$ 1,146,801

Counties	Type of Project	Grant	Sponsor's Contribution	Total Cost Of Project
WORCESTER COUNTY				
Ocean City	Disposal Plant	$ 54,794	$ 67,050	$ 121,844
Pocomoke	Fire Department	22,804	27,872	50,676
Pocomoke City	Municipal Building	21,037	25,902	46,939
Total		$ 98,635	$ 120,824	$ 219,459
	MULTIPLE COUNTIES AND THE STATE OF MARYLAND			
	Highway	$ 1,590,000	$ 4,043,063	$ 5,633,063
	Highway Improvement	1,000,000	1,255,831	2,255,831
	Highway Bridge	2,041,132	3,044,299	5,085,431
	Prison Improvement	409,091	500,000	909,091
	Penal Institutions	69,000	175,079	244,079
	Waterworks, Sewerage	180,000	239,809	419,809
	Waterworks, Sewerage	44,100	53,431	97,531
	Total	$ 5,333,323	$ 9,311,512	$ 14,644,835

BALTIMORE CITY PUBLIC WORKS ADMINISTRATION PROJECTS

Type of Project	Grants	Sponsor's Contribution	Total Cost Of Project
Installing Venturi Water Meter at Montebello	$ ---	$ 45,467	$ 45,467
Four Million Gallon Steel Tank at Milton Avenue Reservoir	---	142,420	142,420
1,500 lin. ft. 30" Main Under Curtis Creek	---	155,022	155,022
Concrete Pressure Tunnel Loch Raven Dam-Montebello Filter Plant	---	5,725,200	5,725,200
Municipal Sanitary Sewer-Tiffany Run Interceptor	168,698	---	168,698
Sewer and Storm Water Drain at Dundalk & Graceland (owes.)	263,499	---	263,499
Storm Water Drain-Janney St. O'Donnell St. to Patapsco River	255,736	---	255,736
2-Sewage Settling Tanks at Back River Plant	70,319	175,000	245,319
Eastern High School	1,532,717	---	1,532,717
Additional Schools	50,470	450,150	500,620
Widening and Paving Fayette Street	3,036	1,064,231	1,067,269
Widening and Paving Forrest and Ensor Streets	11,356	848,721	860,077
Howard Street Extension	511,441	1,836,176	2,347,617

Type of Project	Grants	Sponsor's Contribution	Total Cost Of Project
Hilton Street Bridge	$ 558,554	$	$ 558,554
Laundry Building and Equipment-Balto. City Hospital	---	147,997	147,997
Art Museum Addition	480,579	---	$ 480,579
Colgate Street Bridge	142,188	---	142,188
29th Street Bridge	603,322	---	603,322
Municipal Airport	1,622,562	777,388	2,399,950
Back River Municipal Sewage Treatment Works	2,203,523	103,807	2,307,330
Sewage Disposal Plant-Curtis Bay	780,937	316,480	1,097,417
Totals	$ 9,258,937	$11,788,059	$21,046,996

BALTIMORE CITY

Type of Construction

Sewage Sludge Tanks-Back River Treatment Works	$ 60,000	$ 171,888	$ 231,888
Ashburton Pumping Station	39,000	119,383	158,383
Baltimore City Hospitals-T.B. and Ward "A"	135,000	448.553	583,553
Four School Buildings	157,500	444,080	601,580
Repairs to Roads and Streets	11,767	29,517	41,284
Repairs to Sewerage System	9,000	28,065	37,065
Fire Engine House	10,680	25,552	36,232
Prettyboy Dam Guard Rail	2,124	5,756	7,880
Water Mains in Advance of Improved Streets	12,392	30.165	42,557
Warehouse	32,000	81,170	113,170
Hospital	75,449	187,391	262,840
*Hospital			
Library	101,954	124,755	226,709
Total	$ 646,866	$ 1,696,275	$ 2,343,141

*Loan from Federal Government of $ 175,000. Total Project Cost: $ 185,680.

BALTIMORE CITY	Grants	Sponsor's Contribution	Total Cost of Project
Total (all projects)	$ 9,905,803	$13,484,334	$23,390,137

PUBLIC WORKS ADMINISTRATION NON-FEDERAL PROJECTS BY COUNTIES
STATE OF MARYLAND

Counties	Amount of Grants	Sponsor's Contribution	Total Cost of Project
Allegany	$ 1,016,097	$ 1,801,985	$ 2,818,082
Anne Arundel	754,005	1,486,269	2,240,274
Baltimore	1,314,100	1,781,451	3,095,551
Calvert	58,596	72,318	130,914
Caroline	100,818	125,176	225,994
Carroll	536,948	841,913	1,378,861
Cecil	437,930	585,892	1,023,822
Charles	2,351,970	2,874,630	5,226,600
Dorchester	624,517	966,348	1,590,865
Frederick	725,113	939,352	1,664,465
Garrett	85,385	121,163	206,548
Harford	163,093	274,610	437,703
Howard	205,860	263,746	469,624
Kent	30,630	37,438	68,068
Montgomery	671,609	1,497,345	2,168,954
Prince George's	2,819,160	4,020,704	6,839,864
Queen Anne's	9,725	24,271	33,996
St. Mary's	14,489	17,710	32,199
Somerset	56,581	72,051	128,632
Talbot	89,381	110,510	199,891
Washington	454,249	603,376	1,057,625
Wicomico	470,281	676,520	1,146,801
Worcester	98,635	120,824	219,459
Total Counties	$13,089,172	$19,315,620	$32,404,792
Baltimore City Total (all Projects)	9,905,803	13,484,334	23,390,137
Multiple Counties and the State of Maryland)	5,333,323	9,311,512	14,644,835
Grand Total	$28,328,298*	$42,111,466	$70,439,764

*$28,373,412 as of July 1, 1940; County, City and Multiple Counties and the State of Maryland breakdown not available.

SUMMARY OF P.W.A. NON-FEDERAL ALLOTMENTS FOR THE STATE OF MARYLAND: BY TYPE OF PROJECT

AS OF JULY 1, 1939

	No. of Projects	Allotment			Estimated Cost
		Loan	Grant	Total	
Streets and Highways	14	$ 2,699,600	$ 2,942,517	$ 5,642,117	$ 10,608,808
Sewers, Waterworks, Power and Other Facilities:					
Sewer Systems	30	946,300	3,122,737	4,069,037	8,301,954
Water Systems	14	139,000	267,478	406,478	777,178
Others	2	———	62,460	62,460	138,800
Buildings:					
Educational	41	305,250	5,936,363	6,241,613	15,295,530
Courthouses and City Halls	10	17,000	530,759	547,759	1,232,106
Hospitals	11	175,000	821,563	996,563	2,442,075
Others	10	———	844,255	844,255	2,189,466
Bridges and Viaducts	2	———	4,393,102	4,393,102	10,312,031
Railroad Construction and Equipment	-	16,799,895	———	16,799,895	16,799,895
Miscellaneous	8	42,000	9,456,317	9,498,317	21,495,048
	142	$21,124,045	$28,377,551	$49,501,496	$89,592,891
	142*	21,124,045	28,373,412*	49,497,457*	89,591,718*

* Amounts as of July 1, 1940; Authority: Public Works Administration.

SUMMARY OF P.W.A. FEDERAL ALLOTMENTS

FOR THE STATE OF MARYLAND

BY TYPE OF PROJECT - JULY 1, 1939

Type	No. of Projects	
Street and Highways	93	$ 3,702,115
Sewers, Waterworks, Power, Other Facilities	44	2,141,254
Building:		
Post Office and Administrative	4	252,911
Educational	8	2,945,000
Other	180	13,082,464
Flood Control, Water Power, Reclamation	2	7,872
Water Navigation Aids	14	511,574
Vessels	18	2,554,935
Engineering Structures	3	11,765
Aviation	6	6,704,013
Improvements to Federal Land, Plant Pest and Disease Control and Other Miscellaneous Projects	86	3,881,659
	458	$35,795,562
TOTAL	464*	35,821,381*

*Figures as of July 1, 1940; Source: Public Works Administration; breakdown not available for period July 1, 1939 to July 1, 1940.

SUMMARY OF THE P.W.A. PROGRAM IN MARYLAND

FOR THE PERIOD JUNE 1933-JULY 1, 1940

	Total Estimated Cost	Allotment			Total Man-Hours Worked	Reported Project Costs
		Total	Loan	Grant		
Non-Federal Projects	$89,591,718	$49,497,457	$21,124,045	$28,373,412	30,151,989	$67,994,706
Federal Projects	35,821,381	35,821,381	------	35,821,381	12,370,184	28,293,462
Total	$125,413,099	$85,318,838	$21,124,045*	$64,194,793	42,522,173**	$96,288,168***

* Includes railroad loan for $16,799,895 - construction and equipment.

** For period June 1933 to July 1, 1939; 1940 figures not available.

*** Reported Project Costs represent the cost of materials in place (including the cost of labor performed) and miscellaneous cost for that portion of the work completed - for period June, 1933 to July 1, 1939; 1940 not available.

F E D E R A L W O R K S A G E N C Y

FEDERAL EMERGENCY RELIEF ADMINISTRATION

The need for more substantial financial aid to needy people necessitated the passage of the Federal Emergency Relief Act in May, 1933. This Act created the Federal Emergency Relief Administration*. Through it funds were made available for grants to the states to assist in relieving the hardships and suffering caused by unemployment. These grants-in-aid were continued by subsequent Emergency Relief Acts of 1934, 1935, and 1936.

The Federal Emergency Relief Act provided that its funds were to be allocated to the various state and local relief agencies in accordance with the following objectives: (1) to provide relief on a more adequate basis, (2) to encourage work projects for employable persons, and (3) to introduce some degree of diversification into the relief picture so as to insure the adequate care for special groups of persons whose problems require specialized treatment.

During this emergency relief period this Administration sponsored four special programs: (1) emergency program, (2) college student aid, (3) rural rehabilitation, and (4) transient programs. At the peak of the Federal Emergency Relief Program in March 1935, five and a half million resident families and single persons, representing approximately twenty-one million persons, received financial aid through work relief; approximately three million received direct relief only; and three hundred thousand were aided under the special programs.

The FERA failed objectively in that the projects were not sufficiently diversified to make full use of job experiences of workers and the money paid the workers was insufficient. To remedy these deficiencies, the

*Created in May 1933.

Civil Works Administration was created in November 1933 (see chapter on C.W.A.). Under this program, various types of projects were begun which utilized the past job experiences of the unemployed. Although the C.W.A. program was terminated in 1934, it provided valuable experience for the development of subsequent work programs.

During the years 1933, 1934, and 1935, total obligations incurred from Federal, State, and local funds under the FERA Program in the United States amounted to $4,119,004,631. This included relief extended to cases, costs of special programs and administration; and beginning with April 1934, cost of materials, non-relief supervison, and equipment on emergency relief projects. Approximately 71% of this sum was from Federal funds. From January 1933 through December 1935, combined payrolls for the United States aggregated $1,229,699,107. The total cost of the Emergency Work Relief Program, which began in 1934 after the cessation of the C.W.A., amounted to almost $1,300,000,000. Of this total, 26% was allocated for highways, roads, and streets; 15% for public buildings; 11% for parks and recreational facilities; 9% for sewerage systems; 21% for white-collar and service projects; and 18% for conservation, airports, sanitation and health, and commodity distribution.

Final FERA grants were liquidated by the end of 1935, and the Federal Works Program was initiated in the summer of 1935 to replace the Federal Emergency Relief Administration. The rural rehabilitation program of the FERA was transferred to the Farm Security Administration (formerly the Resettlement Administration) in July 1935. The college student aid program was continued by the N.Y.A. Responsibility for direct relief was returned to the states, and other functions financed under the FERA were absorbed in the Work Program. (See W.P.A.)

F E D E R A L W O R K S A G E N C Y

CIVIL WORKS ADMINISTRATION

People receiving aid through the Federal Emergency Relief Administration were paid on a budgetary deficiency basis and the projects were not sufficiently diversified to make full use of the individual's past job experience. In an effort to remedy these defects to meet the critical unemployment situation during the winter of 1933-1934, and to stimulate recovery through the medium of a large volume of purchasing power in a short period, the Civil Works Administration* was created by Executive Order as "a fundamental change in the federal program to deal with unemployment aspects of the depression."

Objectively, this program was designed to transfer all able-bodied persons from the relief rolls to this "work program." The transfer of persons to Civil Works rolls began on November 16, 1933, and increased until the peak employment was reached in the middle of January 1934. It is estimated that 4,263,644 people were employed nationally under this program during the week ending January 18, 1934. Relief workers represented about one half of this total.

Two of the requisites of Civil Works projects which were undertaken by local public agencies, were that they be socially and economically desirable and of such a character that they could be undertaken quickly. Speed and action were the watchwords laid down by the Civil Works Administration. Wage rates were fixed in accordance with prevailing local rates, but at not less than the minima established by the Civil Works Administration.

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* Created on November 8, 1933; discontinued in April 1934.

From November 1933 to April 1934, approximately $8,897,000 was spent by the Federal Government on projects in the State of Maryland. A total of 49,452 men and women were given employment throughout this program of which 48,347 or 97.8% were men, and 1,105 or 2.2% were women. Of the $8,897,000 expended, approximately one-third was spent by the counties, one-third in Baltimore City, and one-third on Federal and state-wide projects.

Under this program, many types of construction and improvements were conducted, such as city streets, roads, public land improvement, public buildings and equipment, schools and grounds, playgrounds, water supplies, sanitation, drainage systems, shore protection and flood control, research, and airports. There is hardly a community in the State that did not receive benefits from one or more projects made possible by this Administration.

In its program to initiate and carry through this work as quickly as possible, the following disbursements were made from November 1933 to March 1934, inclusive:

Month	Materials	Pay Rolls
November	$ ---------	$ 165,934.92
December	10,934.92	1,189,459.85
January	32,483.05	2,331,374.29
February	236,282.99	1,824,825.65
March	336,112.90	1,711,843.30
TOTALS	$615,813.86	$7,223,438.01

In this short period of time, the Federal government issued 601,086 in United States pay checks, or an average of 31,636 weekly, for the nineteen weeks that this program was underway. The average check to workers on Civil Works Administration projects amounted to $12.01.

F E D E R A L W O R K S A G E N C Y

PUBLIC BUILDINGS ADMINISTRATION

The Public Buildings Administration*, by authority granted to it under the Reorganization Plan of April 3, 1939, is responsible for the administrative, technical and clerical functions incident to the design, construction, maintenance and repair of Federal buildings.

The Office of the Fiscal Manager of this Administration prepares the necessary data and estimates for construction and maintenance, and submits this data to the Bureau of Budget. This Administration also may acquire land upon which public buildings are to be constructed and acts in cooperation with the Post Office Department in the selection of suitable sites for public buildings outside of the District of Columbia.

This agency expended during 1933 to 1938 inclusive, a total of $4,446,556 for construction of its public buildings in Maryland.

This money was spent annually as follows:

1933 -	$ 1,129,201	1936 -	$ 360,953
1934 -	982,595	1937 -	601,637
1935 -	760,845	1938 -	611,325

A complete list of the individual projects constructed by this administration in Maryland is not available. However, a few of the better known projects and their cost are as follows:

(1)	New post office at Chestertown	$ 100,455
(2)	Quarantine station at Baltimore	53,821
(3)	Mining experiment station at College Park for research work in mineral technology	349,926
(4)	New post office at Easton	63,427

* Organized in June 1933 in the Procurement Division of the Department of Treasury; consolidated with Branch of Buildings Management of the National Park Service which formed the new Public Buildings Administration by authority of Reorganization Plan 1, effective July 1, 1939.

F E D E R A L W O R K S A G E N C Y

UNITED STATES HOUSING AUTHORITY

Under the United States Housing Authority*, three communities in Maryland, namely Baltimore, Annapolis and Frederick, have benefited from subsidies and loans made available by this Federal agency.

Baltimore City has already initiated seven slum clearance projects, estimated to cost approximately $20,760,000, in as many different areas throughout the city.

In addition to these, another slum clearance project has been approved by the United States Housing Authority and two others are contemplated. When all of these projects are complete, the loan authorization from the United States Housing Authority will, in all probability, exceed $28,000,000. It is estimated that the annual Federal subsidies for the seven projects now under construction amount to approximately $622,800. Since each municipality must contribute in cash or value an amount equal to 20% of the Federal subsidy, $124,560 will therefore be added by Baltimore City, giving a combined annual subsidy of $747,360. Approval of the three remaining projects would probably boost combined annual subsidies, both Federal and local, in excess of $1,000,000.

The first seven projects alone will provide nearly 4,000 new dwelling units, providing for the rehabilitation of a like number of families or approximately 17,000 persons. It is hoped that the rehabilitation of these families will be completed by 1942.

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* Created September 21, 1937 under general supervision of the Secretary of the Department of the Interior; Executive Order #7732 of October 27, 1937 transferred to the Authority all housing and slum clearance projects of the Federal Emergency Administration of Public Works and the slum clearance activities of the Public Works Administration; under authority of Reorganization Plan No. 1, transferred from the Department of the Interior to the Federal Works Agency, effective July 1, 1939.

The following data concerns the seven projects now under construction and are presented to summarize several important features of the individual projects. While the number of dwelling units given are actual figures, the ultimate cost as well as subsidies are dependent upon final construction and incidental costs. These costs and subsidies cannot be definitely ascertained at this time and, therefore, the best estimates available are herewith presented:

Poe Homes: This project, now under construction, is on the site of one of the City's slum areas and adjacent to the City's largest business district. Intended for negro families, it will consist of 298 dwelling units and will house approximately 1,250 persons. The site, including cost of demolishing the original structures, is estimated to cost $475,000. The total cost of this project when completed will reach approximately $1,840,000 or an average cost of $6,174 per dwelling unit. Based upon this completed construction cost, annual Federal subsidies are estimated at $55,000 and municipal participation to the extent of $11,000.

Perkins Homes: This site, also a former slum area, is in the Eastern section of the City. The cost of demolishing the original structures is estimated at $1,024,000. This development, intended for white families, will consist of 688 dwelling units which will house approximately 3,000 persons. It is estimated that the total cost of the project when completed, will aggregate approximately $4,207,000 or $6,114 per dwelling unit. It is estimated that annual Federal subsidies will approximate $126,210, whereas municipal participation will be to the extent of some $25,200.

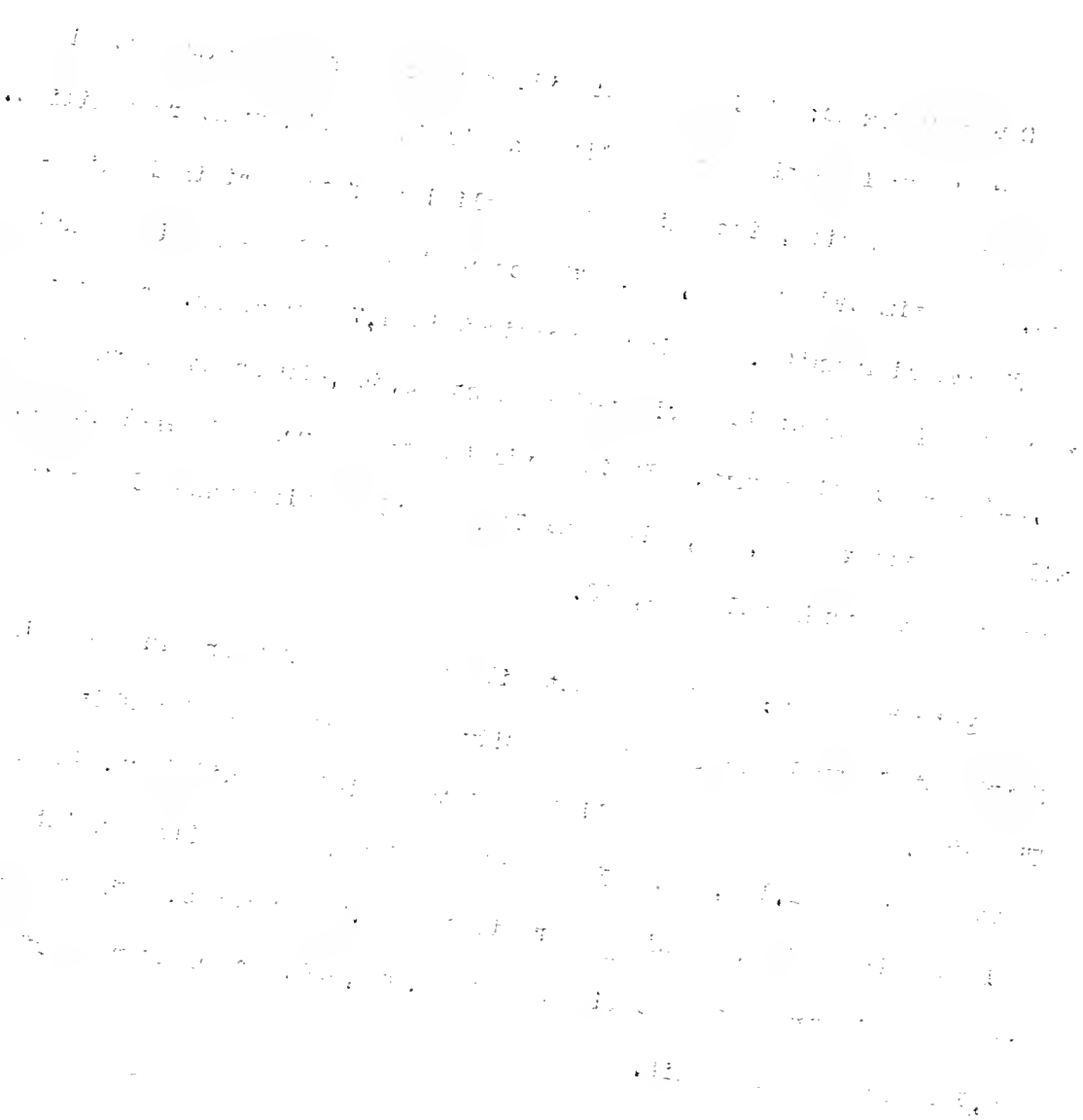
Armistead Gardens: Intended for white families, this site was originally unoccupied, which explains the low site cost of $160,000. This site is in the extreme Eastern end of the City and when the project is completed it will provide 700 dwelling units for approximately 3,300 inhabitants. The total estimated cost of this project is expected to reach $2,362,000, or an average cost of $3,374 per dwelling unit. It is estimated that Federal subsidies will approximate $70,860 annually, with the City supplying approximately $14,100 each year.

McCulloh Homes: The site for this project is one of a former slum area in the Central part of the City. Intended for negro families, the cost of demolishing the original structures is estimated at $624,000. This project when completed will provide for 434 dwelling units to accomodate approximately 2,000 persons. The total estimated cost of this project when completed will be about $2,364,000 or an average cost of $5,447 per dwelling unit. It is estimated that the annual Federal subsidies will approximate $70,920, as compared to the City's annual participation of approximately $14,200.

Gilmor Homes: This site, in the West Central section of the City and originally a slum area, when improved, is intended to house negro families. The cost of demolishing the old structures in preparation for the new is estimated to cost $844,000. When completed, this development will consist of 647 dwelling units to accomodate approximately 2,750 persons at a cost of $3,592,000 or an average cost of $5,552 per dwelling unit. It is estimated that annual Federal subsidies will approximate $107,760, and the City will contribute approximately $21,500.

Douglass Homes: This project will replace a former slum area in the East Central section of the City and is intended for negro families. The cost of the site, including the demolition of the original buildings, is estimated at $703,000. The completed development will consist of 393 dwelling units, housing approximately 1,700 persons. The total cost of this project is estimated to cost $2,367,000 or an average of $6,023 per dwelling unit. It is estimated that annual Federal subsidies will approximate $71,010, with the City participating annually to the extent of approximately $14,200.

Latrobe Homes: This project will replace a former slum area in the Northeast Central section of the City and is intended for white families. The site, including the demolition of the original buildings, is estimated to cost $1,128,000. The completed development will consist of 701 dwelling units, housing approximately 3,000 persons. The total cost of this project is estimated at $4,028,000, or an average of $5,746 per dwelling unit.



FEDERAL WORKS AGENCY - UNITED STATES HOUSING AUTHORITY

FUNDS AVAILABLE TO LOCAL HOUSING AUTHORITIES OF THE STATE OF MARYLAND

1937 - 1940

	BALTIMORE	ANNAPOLIS	FREDERICK	TOTAL
(a) Advances by the U.S.H.A.				
Nov. 1, 1937 to June 30, 1938	$ 400,000	$ —	$ —	$ 400,000
July 1, 1938 to June 30, 1939	410,000	126,000	7,000	543,000
July 1, 1939 to June 30, 1940	7,428,000	274,000	90,000	7,792,000
Gross Advances	$ 8,238,000	$ 400,000	$ 97,000	$ 8,735,000
(b) Less: Repayments by Local Housing Authorities	8,238,000	—	97,000	8,335,000
Net Advances June 30, 1940	—	$ 400,000	—	$ 400,000
(c) Temporary Local Financing to June 30, 1940	$ 13,950,000	$ —	$ 230,000	$ 14,180,000
(d) Local Authority "A" Bonds Sold to June 30, 1940	—	$ 74,000	—	$ 74,000
Total Funds Available to Local Housing Authorities June 30, 1940	$ 13,950,000	$ 474,000	$ 230,000	$ 14,654,000

Items (b), (c) and (d) were transactions which occurred only during the fiscal year ending June 30, 1940.

D E P A R T M E N T O F T H E I N T E R I O R

FISH AND WILDLIFE SERVICE

Among the activities of the Bureau of Biological Survey, is included the "wildlife service" of the Federal government which includes all vertebrate wildlife. As part of the Bureau's activities, it conducts research, establishes and maintains refuges, regulates migratory bird hunting, administers Federal wildlife laws and cooperates with local and other governmental agencies in the control of injurious species.

To perpetuate the habitat of wildlife, the Bureau establishes and maintains refuges for game and other species. In addition, the Bureau maintains stations for experiments in wildlife propagation and bird and animal research.

During the period of this report the Bureau of Biological Survey sponsored two projects in Maryland. These projects consisted of refuge buildings, roads, trails, wildlife habitat improvements, etc. One of these projects was constructed at the Patuxent Wildlife Research Refuge located near Bowie in Prince George's County, at a total cost of $760,484. Of this amount, the Public Works Administration contributed $234,008; the Civilian Conservation Corps, $27,478; and the Work Projects Administration, $498,998. The other station was constructed at the Blackwater Migratory Bird Refuge, located near Cambridge in Dorchester County and was completed at a cost of $103,337. Of this amount the P.W.A. contributed $7,112; the W.P.A., $28,991; and the C.C.C., $67,224. These funds constitute emergency funds made available by the several agencies for development purposes

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* The Bureau of Fisheries, established in 1870 under the jurisdiction of the Department of Commerce, and the Bureau of Biological Survey, established in 1885 under the jurisdiction of the Department of Agriculture, was transferred to the Department of the Interior on July 1, 1939. Under the authority of the Reorganization Plan III on June 30, 1940, the work of the two bureaus was consolidated under the Fish and Wildlife Service.

of the Bureau of Biological Survey. Unfortunately, an annual breakdown of these expenditures for these projects is not available.

Beltsville Research Center - Patuxent Research Refuge

The various programs for the development of this area has greatly benefited wildlife. Experiments now in progress will determine under what conditions wildlife may be produced on wastelands now being retired from farm crops, and also on land devoted to agriculture and forestry. Farmers will be given demonstrations on improved methods of managing various species for food and cover conditions. Numerous species are being restored, including ruffed grouse, wild turkeys, and white-tailed deer. The Bobwhite quail is receiving special study. Opossums, squirrels, foxes, skunks, muskrats, and beaver are stocked on the refuge. Water fowl is being studied on Cash Lake, another refuge development. General farming practices of game bird and animal propagation, improving game farming techniques, and supplying game birds and animals for stocking the refuge at Beltsville, are to be included in the study.

In addition, a survey of diseases of wildlife is in progress. Disease investigations are being made of wildlife in this area and also of fur animals in captivity. Studies will cover inter-relationship of diseases and parasites to nutrition and sanitation, and as a source of infection or infestation to human being and livestock.

Bird banding studies will show (1) migratory bird usage of the area, (2) the seasonal use of Cash Lake and Patuxent River, (3) dates of arrival, and (4) population of birds.

D E P A R T M E N T O F T H E I N T E R I O R

GEOLOGICAL SURVEY

Maryland has maintained an established system of investigation of its surface water resources as well as facilities for stream flow recordings since 1894.

From the initial gaging station established on the North Branch of the Potomac River at Cumberland in June 1894, the State now has 36 gaging stations scattered within its borders.

In 1928, the War Department was authorized by an Act of Congress to allocate funds for the purpose of investigating and studying the major streams throughout the United States. Through this Federal Assistance, with the cooperation of the War Department and the United States Geological Survey*, Maryland increased its number of gaging stations to 23 in 1930. By June 1940, this number was further increased to the present 36 stations. The latter increase was due primarily to the necessity of having available records of the amount of water to be taken care of in the preparation of plans for flood control projects.

It is interesting to note that through the United States Geological Survey, approximately 90% of the expenditures made for the establishment and maintenance of gaging stations in the 30 odd years through 1925 was with Federal funds. During this period, the State contributed less than $5,000 of the total of $50,000 spent.

On page 82, expenditures are shown for the installation and maintenance of gaging stations on Maryland streams from 1924 to 1940, as contributed by the various governmental agencies. It will be noted

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* Gaging Stations.

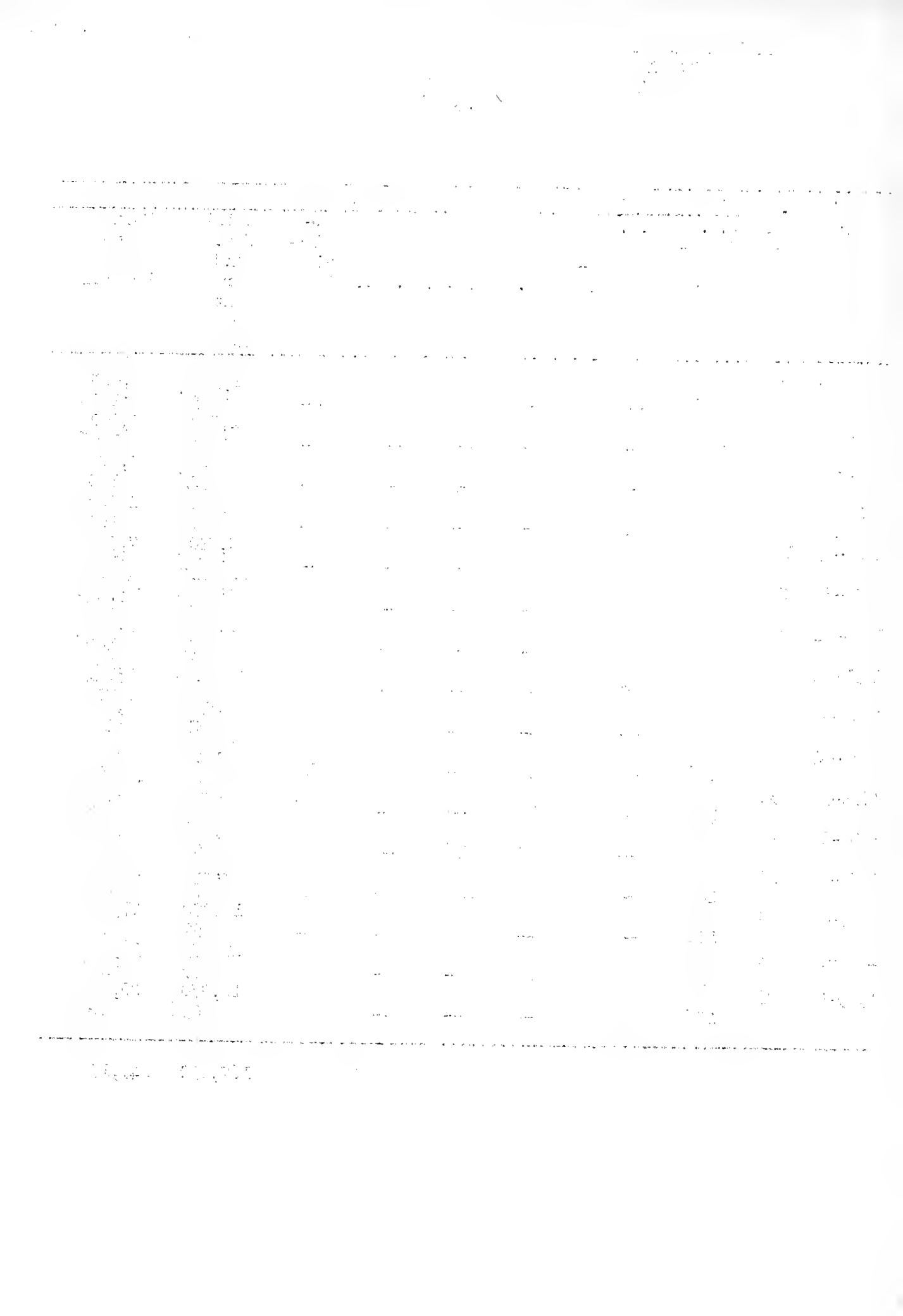
that in the absence of more accurate data, figures for some of the earlier years are estimated.

In 1927, the City of Baltimore initiated studies concerning possible sources of additional water supply for the city. Shortly thereafter, in 1928, Congress authorized the War Department, through its United States Engineers Office, to cooperate with municipal governments in their water problems. The State did not take advantage of this Act until 1931, although prior to that year some work had been done through the Upper Potomac River Board. Prior to and through 1930, cooperation by the Federal and state governments was on the basis of $1.00 of Federal funds to be matched by $2.00 of state funds. However, beginning with 1931, financial cooperation was put on a 50-50 basis.

In 1933, large amounts of relief funds were made available to the State. These funds, together with appropriations from the United States Engineers Office, were used to improve and repair existing gaging stations and for the construction of some new stations. Many stations were improved by the installation of wells and recording gages in modern reinforced concrete gagehouses. This improvement replaced the original staff gages which were read only once or twice a day. The reinforced concrete structure for the recording gage on the Maryland side of the Potomac River at Paw Paw, West Virginia, is the highest in the State. Other gage houses vary in height from about 25 feet over-all to 50 or 60 feet.

ANNUAL EXPENDITURES OF FUNDS FROM STATE AND FEDERAL SOURCES FOR CONSTRUCTION, OPERATION AND MAINTENANCE OF GAGING STATIONS IN THE STATE OF MARYLAND (1924-1940)

Fiscal year	No. of gaging stations	FEDERAL FUNDS						Total Fed. and Per Cent of Total	Total State and Federal
		U.S. Geological Survey	U.S. Engineer Office-D.C.	P.W.A.	W.P.A.	C.W.A.	National Park Service		
1924-25	6	75%	--	--	--	--	--	$1,500 75%	$ 2,000 100%
1925-26	6	75%	--	--	--	--	--	1,500 75%	2,000 100%
1926-27	9	32%	--	--	--	--	--	1,600 32%	5,000 100%
1927-28	9	56%	14%	--	--	--	--	1,960 70%	2,800 100%
1928-29	12	21%	58%	--	--	--	--	5,780 79%	7,320 100%
1929-30	24	28%	33%	--	--	--	3%	11,675 64%	18,240 100%
1930-31	23	31%	31%	--	--	--	3%	6,340 65%	9,750 100%
1931-32	29	47%	7%	--	--	--	4%	11,830 58%	20,400 100%
1932-33	30	46%	--	--	--	--	5%	8,830 51%	17,310 100%
1933-34	30	16%	--	42%	--	15%	1%	21,150 74%	28,580 100%
1934-35	31	42%	--	17%	--	--	2%	10,310 62%	16,630 100%
1935-36	27	41%	--	18%	1%	--	2%	8,660 62%	13,970 100%
1936-37	28	22%	--	12%	44%	--	1%	24,000 79%	30,380 100%
1937-38	28	48%	--	--	9%	--	--	10,070 57%	17,670 100%
1938-39	31	23%	26%	27%	--	--	3%	28,875 79%	36,550 100%
1939-40	36	45%	16%	--	--	--	2%	12,970 63%	20,590 100%
						Totals		$167,050	$249,190



ANNUAL EXPENDITURES OF FUNDS FROM STATE AND FEDERAL SOURCES
FOR CONSTRUCTION, OPERATION AND MAINTENANCE OF
GAGING STATIONS IN THE STATE OF MARYLAND
(1924-1940)

Fiscal year	No. of gaging stations	MARYLAND					
		Geological survey	Upper Potomac River Board	City of Baltimore	Washington Sub. San. District	City of Salisbury	Total
1924-25	6	18%	--	--	7%	--	$ 500 25%
1925-26	6	18%	--	--	7%	--	500 25%
1926-27	9	10%	--	55%	3%	--	3,400 68%
1927-28	9	--	--	25%	5%	--	840 30%
1928-29	12	--	--	9%	12%	--	1,540 21%
1929-30	24	--	23%	11%	1%	1%	6,565 36%
1930-31	23	--	11%	12%	10%	2%	3,410 35%
1931-32	29	28%	6%	4%	3%	1%	8,570 42%
1932-33	30	32%	7%	5%	4%	1%	8,480 49%
1933-34	30	12%	4%	5%	4%	1%	7,430 26%
1934-35	31	22%	7%	5%	3%	1%	6,330 38%
1935-36	27	18%	8%	6%	5%	1%	5,310 38%
1936-37	28	12%	3%	3%	2%	1%	6,380 21%
1937-38	28	28%	6%	5%	3%	1%	7,600 43%
1938-39	31	14%	3%	2%	1%	1%	7,675 21%
1939-40	36	24%	5%	4%	3%	1%	7,620 37%

(1924-1940) Total for State of Maryland $82,140

D E P A R T M E N T O F T H E I N T E R I O R

UNITED STATES GEOLOGICAL SURVEY (Topographic Survey)

The United States Geological Survey, through its Topographic Survey Division, conducted several topographic surveys and prepared and published maps pertaining to specific areas in the State of Maryland during 1927, 1928, 1934, 1935, 1936, 1937, 1939 and 1940.

The various phases of the Survey's work, which constituted revision surveys, resurveys, transit traverse surveys and spirit leveling surveys accounted for $75,330 of federal expenditures.

TOPOGRAPHIC SURVEYS IN MARYLAND BY THE U.S. GEOLOGICAL SURVEY

Fiscal Year	Quadrangle or Project Name	Revision Surveys (Square Miles)	Resurveys (Square Miles)	Transit Traverse (Linear Miles)	Spirit Leveling (Linear Miles)	Cost
1927	Revision of Maryland, part of the District of Columbia and vicinity map	50	--	--	--	$ 600
1928	Same as 1927	193	--	--	--	1.297
1934	Prince Frederick, Upper Marlboro and Leonardtown	--	134	267	243	24,434
1935	Same as 1934	--	226	--	--	11,701
1936	Leonardtown	--	160	71	31	10,776
1937	Greenbelt and Vicinity	--	--	143	--	2,787
1939	Elkton and Havre de Grace	--	--	--	--	14,919
		(381				
1940	Same as 1939	(	--	--	--	8,814
	TOTALS	624	570	481	274	$ 75,330

N A V Y D E P A R T M E N T

BUREAU OF YARDS AND DOCKS

The Bureau of Yards and Docks* of the Navy Department is authorized to design and construct all naval public works such as drydocks, marine railways, ship-ways, harbor works, quay walls, piers, wharves, ships, dredging, landings, floating and stationary cranes, power plants, coaling plants, heating, lighting, telephone, water, sewer and and railroad systems, roads, walks and grounds, bridges, radio towers and all buildings for whatever purpose they are needed by the Navy and the Marine Corps.

In general, the work performed by the Bureau is carried out by commissioned officers of the Corps of Civil Engineers of the United States Navy.

The expenditures made by this Bureau provided for improvements at the naval radio station at Annapolis and Carderock, Maryland, and totalled $5,804,729 for the period 1929 to 1939, inclusive. The following tabulation indicates the work performed at each place:

* The office of the Secretary of Navy was established by Act of Congress on April 30, 1798. The Act of August 31, 1842, created the Bureau of Navy Yards and Docks. The Act of July 5, 1862, established the Bureau of Yards and Docks.

ANNAPOLIS, MARYLAND

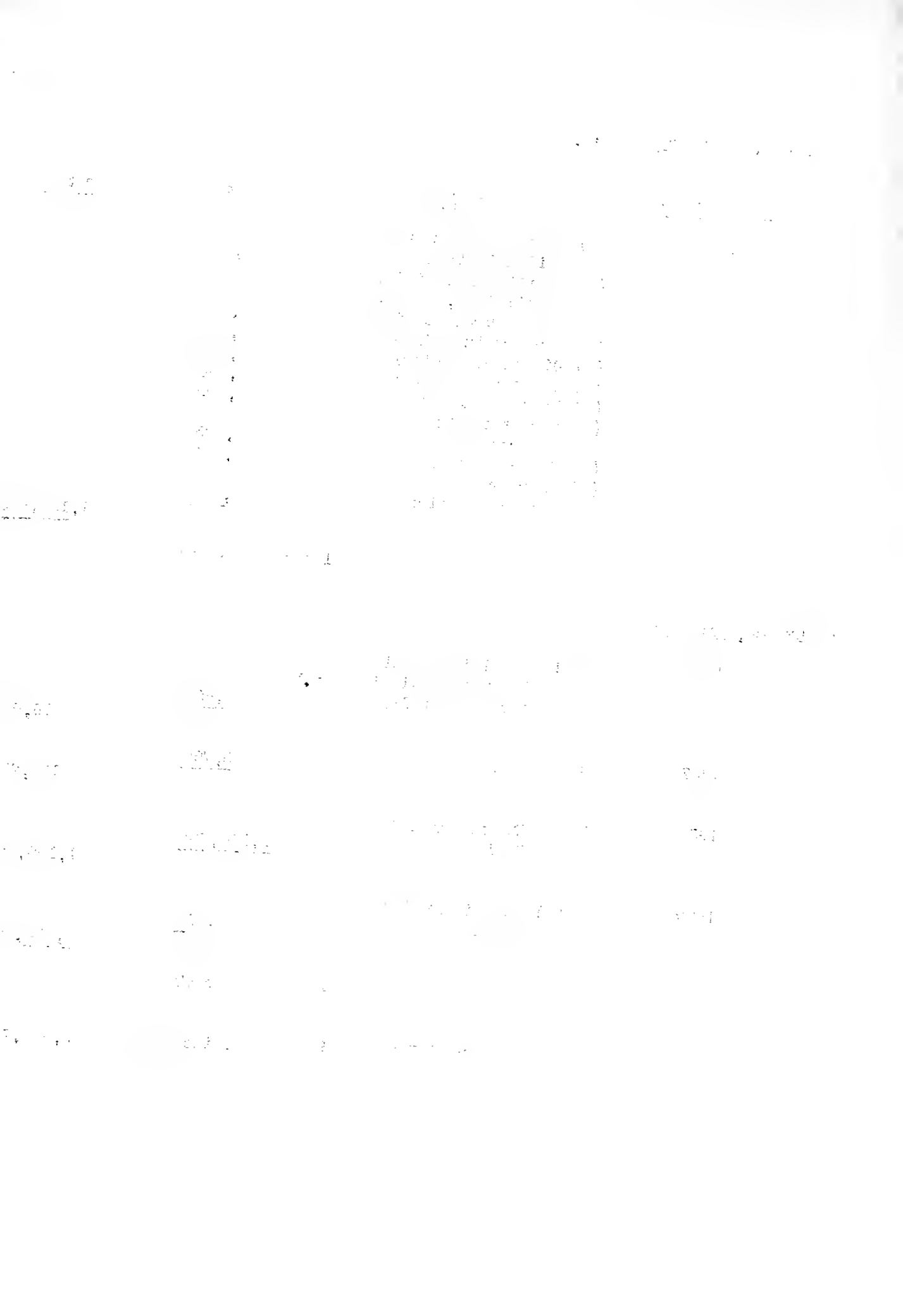
Fiscal Year	Work Item	Cost	Total
1929	Boiler House	$ 54,636	$ 54,636
1930	(1) Boiler House	38,320	
	(2) Improvement of interior illumination	49,525	87,845
1931	(1) Boiler House	44,872	
	(2) Improvement of interior illumination	144,229	189,101
1932	(1) Boiler House	16,126	
	(2) Improvement of interior illumination	108,988	125,114
1933	(1) Boiler House	2,935	
	(2) Improvement of interior illumination	7,123	10,058
1934	(1) Improvement of interior illumination	20,397	20,397
1935	None		
1936	(1) Additional facilities: buildings, accessories, and purchase of land	41,159	41,159
1937	(1) Additional facilities: buildings, accessories, and purchase of land	66,053	66,053
1938	(1) Improvement of interior illumination	406,144	
	(2) Additional facilities: buildings, accessories, and purchase of land	351,343	757,487

ANNAPOLIS, MARYLAND, cont'd.

Fiscal Year	Work Item	Cost	Total
1939	(1) Improvement of interior illumination	41,275	
	(2) Additional facilities: buildings, accessories, and purchase of land	70,606	
	(3) Laundry buildings	70,415	
	(4) Dispensary buildings	65,399	
	(5) Quarters for Officers	692,994	
	(6) Storeage Sheds	19,800	
	(7) Dormitory for hospital corpsmen	47,973	
	(8) Enlarged Chapel	67,784	
	(9) Quarters for operators radio station	27,642	
			$ 1,103,888
	Total for Annapolis		

CARDEROCK, MARYLAND

1936	Radio receiving station, including buildings and purchase of land	16,886	
			16,886
1937	Same as 1936	155,755	
			155,755
1938	Naval Experimental Model Basin	1,100,352	
			1,100,352
1939	Naval Experimental Model Basin	2,075,998	
			2,075,998
	Total for Carderock		
	Grand Total 1929 to 1939, inclusive		$ 5,804,729



W A R D E P A R T M E N T

CORPS OF ENGINEERS

By authority given to the Corps of Engineers* by Congress, this agency is charged with the supervision of all Federal investigations and improvements of navigation, flood control and power development on rivers and harbors. These duties include the examination and survey of rivers and harbors, administration of laws for the protection of navigable waters, establishment of harbor lines and anchorage grounds, establishment of regulations for the navigation of waterways, approval of plans for bridges and dams, and issuance of permits for dredging, dumping or other related phases of work associated with navigable waterways.

Plans for the improvement of river and harbor facilities are investigated by the Board of Engineers for Rivers and Harbors, to which the Chief of Corps of Engineers refers recommendations and reports based upon surveys by the Corps of Engineers.

The most extensive work performed by this agency in Maryland during 1924 to 1940 had to do with the dredging of the Baltimore Harbor and Channels, and the Chesapeake and Delaware Canal. New work performed on the Baltimore Harbor and Channels during the fiscal years 1924, 1930, 1931, 1932, 1933 and 1934 amounted to $2,474,062, while the maintenance cost for the same project for the fiscal years 1924 to 1940 inclusive (no maintenance expenditures during 1933) amounted to $3,815,189.

New work on the Chesapeake and Delaware Canal performed during the fiscal years 1924 to 1939 inclusive totalled $14,944,995, whereas the maintenance cost for this project amounted to $7,001,439 for the fiscal years of 1927 to 1939 inclusive.

Work on river, harbor and flood control improvements within the State for the fiscal years 1924 to 1939 inclusive are summarized as follows:

*Created by Act of Congress in August 1789.

WAR DEPARTMENT - CORPS OF ENGINEERS

Fiscal Year	New Work		Maintenance		Total
1924	Baltimore Harbor and Channels: Dredging channels and anchorages	$50,727	Baltimore Harbor and Channels: Dredging channels and anchorages	$635,539	
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal	$1,962,796	Queenstown Harbor, Maryland: Dredging 10-foot channel in Chester River	$7,309	
			Claiborne Harbor: Dredging 12-foot channel and jetty work	$7,404	
			Cambridge Harbor: Dredging channels and turning basins	$900	
		$2,013,523		$651,152	$2,664,675
1925	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal	$2,534,235	Baltimore Harbor and Channels: Dredging channels and anchorages	$477,035	
			Queenstown Harbor, Maryland: Dredging 10-foot channel in Chester River	$5	
		$2,534,235		$477,040	$3,011,275
1926	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal	$1,874,908	Baltimore Harbor and Channels: Dredging Channels and anchorages	$202,438	
		$1,874,908		$202,438	$2,077,346

Fiscal Year	New Work		Maintenance		Total
1927	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $446,503	$446,503	Baltimore Harbor and Channels: Dredging Channels and anchorages $228,479 Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $410,000	$638,479	$1,084,982
1928	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $152,536 Crisfield Harbor: Dredging 12-foot channel and two 7-foot channels $1	$152,537	Baltimore Harbor and Channels: Dredging Channels and anchorages $200,774 Potomac River Below Washington: Dredging 24-foot channel from mouth of river to Washington $142,230 Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $755,656	$1,098,660	$1,251,197
1929	Cambridge Harbor: Dredging Channels and turning basins $20,276 Crisfield Harbor: Dredging 12-foot channel and two 7-foot channels $51,739 Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $266,235		Baltimore Harbor and Channels: Dredging Channels and anchorages $325,948 Claiborne Harbor: Dredging 12-foot channel and jetty work $11,306 Chester River: Dredging 6-foot channel from Crumpton to Jones Landing $13,732		

Fiscal Year	New York	Maintenance	Total
1929 (cont'd.)		Wicomico River: Dredging at Salisbury and North and South Prongs $5,075	
		Potomac River below Washington Dredging 24-foot channel from mouth of river to Washington $19,550	
		Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $1,054,538	
	$338,250	$1,430,149	$1,768,399
1930	Baltimore Harbor and Channels: Dredging Channels and anchorages $296,541	Baltimore Harbor and Channels: Dreging Channels and anchorages $407,625	
	Crisfield Harbor: Dredging 12-foot channel and two 7-foot channels $5,469	Chester River: Dredging 6-foot channel from Crumpton to Jones Landing $9,845	
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $73,776	Wicomico River: Dredging at Salisbury and in North and South Prongs $23,453	
		Broad Creek: Dredging 6-foot channel from Pocomoke Sound to Little Annemessex River $26,486	
		Potomac River below Washington: Dredging 24-foot channel from mouth of river to Washington $27	

1930 (cont'd)

		$375,786	
1931	Baltimore Harbor and Channels: Dredging channels and anchorages	$635,961	
	Claiborne Harbor: Dredging 12-foot channel and jetty work	$13,052	
	Elk and Little Elk Rivers: Dredging 7-foot channel to Elkton and 7-foot channel in lower Little Elk River	$2,697	
	Choptank River: Dredging in vicinity of Denton	$5,316	
	Wicomico River: Dredging at Salisbury and in North and South Prongs	$54,208	
	Twitch Cove and Big Thoroughfare River: Channel 4-miles long Traversing Smith's Island	$7,644	
	Herring Bay and Rockhold Creek: Dredging, break-water construction 7-foot channel on Rockhold Creek	$6,300	
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal	$227,597	
		$697,033	$1,072,819
	Baltimore Harbor and Channels: Dredging channels and anchorages	$309,351	
	Chester River: Dredging 6-foot channel from Crumpton to Jones Landing	$4,431	
	Corsica River: Dredging 8-foot channel to Centreville, including a turning basin	$2,086	
	Wicomico River: Dredging at Salisbury and in North and South Prongs	$222	
	Broad Creek: Dredging 6-foot channel from Pocomoke Sound to Little Annemessex River	$879	
	Potomac River below Washington: Dredging 24-foot channel from mouth of river to Washington	$299	
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal	$416,257	

1931 (cont'd)	Chesapeake and Delaware Canal; Delaware and Maryland; enlargement of canal $98,620			
		$823,818	$724,525	$1,548,343
1932	Baltimore Harbor and Channels: Dredging channels and anchorages $672,985		Baltimore Harbor and Channels: Dredging channels and anchorages $27,467	
	Claiborne Harbor: Dredging 12-foot channel and jetty work $47		Chester River: Dredging 6-foot channel from Crumpton to Jones Landing $975	
	Wicomico River: Dredging at Salisbury and in North and South Prongs $20,150		Corsica River: Dredging 8-foot channel to Centreville, including a turning basin $13,828	
	Twitch Cove and Big Thoroughfare River: Channel 4-miles long traversing Smith's Island $1,355		Broad Creek: Dredging 6-foot channel from Pocomoke Sound to Little Annemessex River $6,183	
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $76,488		Potomac River below Washington: Dredging 24-foot channel from mouth of river to Washington $2,317	
	Elk and Little Elk Rivers: Dredging 7-foot channel to Elkton and 7-foot channel in lower Little Elk River $4,152		Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $318,680	
		$975,677	$369,450	$1,346,127

1933	Baltimore Harbor and Channels: Dredging channels and anchorages $490,297			
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $166,781			
		$657,078		
			Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $354,810	
			$354,810	$1,011,888
1934	Baltimore Harbor and Channels: Dredging channels and anchorages $127,531			
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $76,817			
		$204,348		
			Baltimore Harbor and Channels: Dredging channels and anchorages $55,474	
			Twitch Cove and Big Thoroughfare River: Channel 4-miles long traversing Smith's Island $258	
			Potomac River below Washington: Dredging 24-foot channel from mouth of river to Washington $1,000	
			Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $376,872	
			$433,604	$637,952
1935	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $5,050			
			Baltimore Harbor and Channels: Dredging channels and anchorages $244,505	
			Chester River: Dredging 6-foot channel from Crumpton to Jones Landing $11,500	
			Wicomico River:	

1935 (cont'd)

North and South Prongs $8,374

Twitch Cove and Big Thoroughfare River:
Channel 4-miles long traversing Smith's Island $12,541

Queen City Inlet and Sinepuxent Bay:
Dredging and jetty construction $606

Potomac River below Washington:
Dredging 24-foot channel from mouth of river to Washington $1,000

Chesapeake and Delaware Canal:
Delaware and Maryland; enlargement of canal $500,474

$779,000 $784,050

$5,050

1936

Parish Creek:
Dredging 8-foot channel to South Fork of Parish Creek, also 6-foot anchorage $5,292

Chesapeake and Delaware Canal:
Delaware and Maryland; enlargement of canal $21,123

Baltimore Harbor and Channels:
Dredging channels and anchorages $215,815

Wicomico River:
Dredging at Salisbury and in North and South Prongs $8,325

Queen City Inlet and Sinepuxent Bay:
Dredging and jetty construction $8,014

Potomac River below Washington:
Dredging 24-foot channel from mouth of river to Washington $51,366

			Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $686,518	
		$28,415	$970,038	$996,453
1937	Twitch Cove and Big Thoroughfare River: Channels 4-miles long traversing Smith's Island $16,000		Baltimore Harbor and Channels: Dredging channels and anchorages $2,604	
	Parish Creek: Dredging 8-foot channel to south fork of Parish Creek, also 6-foot anchorage $13,877		Wicomico River: Dredging at Salisbury and in North and South Prongs $831	
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $4,306,454		Susquehanna River above and below Havre de Grace: Dredging $25,032	
			Queen City Inlet and Sinepuxent Bay: Dredging and jetty construction $107,875	
			Potomac River below Washington: Dredging 24-foot channel from mouth of river to Washington $81,350	
			Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal $279,773	
		$4,336,331	$497,465	$4,833,796
1938	Pocomoke River: Dredging 7-foot channel through "The Muds" and 9-foot channel to Snow Hill $91,409		Baltimore Harbor and Channels: Dredging channels and anchorages $51,375	

1938 (cont'd)

Chesapeake and Delaware Canal:
Delaware and Maryland; enlargement of canal $2,734,477

Cumberland:
Preparation of plans for flood protection of City $21,674

Wicomico River:
Dredging at Salisbury and in North and South Prongs $168

Queen City Inlet and Sinepuxent Bay:
Dredging and jetty construction $15,487

Nanticoke River (including northwest Fork) Delaware and Maryland $78

Potomac River below Washington:
Dredging 24-foot channel from mouth of river to Washington: $1,689

Chesapeake and Delaware Canal:
Delaware and Maryland; enlargement of canal $924,059

$3,847,560 $992,856 $3,840,416

1939

Cambridge Harbor:
Dredging channels and turning basins $375

Waterway from Little Choptank River to Choptank River:
Dredging 6-foot channel $305

Wicomico River:
Dredging at Salisbury and in North and South Prongs $2,128

Baltimore Harbor and Channels:
Dredging channels and anchorages $274,829

Broad Creek:
Dredging 6-foot channel from Pocomoke Sound to Little Annemessex River $5,731

Susquehanna River above and below [illegible] de Grace $79

1939 (cont'd)

Crisfield Harbor:
Dredging 12-foot channel and two 7-foot channels $742

Upper Thoroughfare, Deal's Island:
Dredging and breakwater construction, Somerset County $225

Northeast River:
Dredging 7-foot channel to the foot of Church Street, in town of North East $230

Rock Hall Harbor:
Dredging 7-foot channel and turning basin; breakwater construction $37,830

Island Creek:
Dredging 8-foot channel through entrance bar $107

Fishing Bay:
Dredging 6-foot channels to packing houses on McCready's Creek, Farm Creek Goose Creek $12,417

Nanticoke River:
Dredging and jetty work for small boat harbor at Nanticoke $65,100

Pocomoke River:
Dredging 7-foot channel through "The Muds" and 9-foot channel to Snow Hill $56,048

Queen City Inlet and Sinepuxent Bay:
Dredging and jetty construction $5,694

Honga River and Tar Bay (Barren Island Gaps):
Dredging 7-foot channel from Chesapeake Bay to Honga River $14,169

Pocomoke River:
Dredging 7-foot channel through "The Muds" and 9-foot channel to Snow Hill $17,505

Nanticoke River (including northwest Fork) Delaware and Maryland;
Dredging channels and basins $5,921

Potomac River below Washington;
Dredging 24-foot channel from mouth of river to Washington $388

Chesapeake and Delaware Canal:
Delaware and Maryland; enlargement of canal $696,205

1939 (cont'd)	Fishing Creek: Dredging 7-foot channel and anchorage near North Beach	$222		
	Back Creek, Anne Arundel County: Dredging 6-foot channel into Back Creek protected by a stone jetty	$14,025		
	Cypress Creek: Dredging 7-foot channel through entrance bar	$157		
	Neale Sound: Dredging channels into Neale Sound	$12,600		
	St. Jerome's Creek: Dredging near Airedale	$17,856		
	Chesapeake and Delaware Canal: Delaware and Maryland; enlargement of canal	$148,197		
	Cumberland: Preparation of plans for flood protection of City	$28,168		
		$396,732	$1,020,521	$1,417,253
1940	Baltimore Harbor and Channels Dredging channels and anchorages	$164,931		

1940
(cont'd)

Northeast River:
Dredging 7-foot channel to the foot of Church Street, in the town of North East $7,619

Inland Waterway from Delaware River to Chesapeake Bay, Delaware and Maryland $362,024

Rock Hall Harbor:
Dredging 7-foot channel and turning basin; breakwater construction $14,170

Island Creek:
Dredging 8-foot channel through entrance bar $6,122

Cambridge Harbor:
Dredging channels and truning basins $1

Fishing Bay:
Dredging 6-foot channel to packing houses on McCready's Creek, Farm Creek, Goose Creek $21,456

Nanticoke River:
Dredging and jetty work for small boat harbor at Nanticoke $8,142

Susquehanna River above and below Havre de Grace $5,916

Inland Waterway from Delaware River to Chesapeake Bay, Delaware and Maryland $987,322

Nanticoke River (including Northwest Fork) Delaware and Maryland $388

Upper Thoroughfare, Deals Island:
Dreding and breakwater construction, Somerset County $3,953

Pocomoke River:
Dredging 7-foot channel thorough "The Muds" and 9-foot channel to Snow Hill $1,689

Twitch Cove and Big Thoroughfare River:
Channel 4-miles long traversing Smith's Island $488

Ocean City Harbor and Inlet and Sinepuxent Bay
Dreding and jetty construction $5,142

Fishing Creek: $3

1940 (cont'd)

Wicomico River
Dredging at Salisbury and in North and South Prongs $35,224

Upper Thoroughfare, Deals Island:
Dredging and Breakwater construction, Somerset County $24,570

Crisfield Harbor:
Dredging 12-foot Channel and two 7-foot channels $1,159

Twitch Cove and Big Thoroughfare River:
Channel 4-miles long traversing Smith's Island $59,973

Herring Bay and Rockhold Creek:
Dredging, breakwater Construction 7-foot Channel on Rockhold Creek $41,045

Back Creek, Anne Arundel County: $6,194

Annapolis Harbor:
Dredging a channel 15 feet deep and 100 feet wide from deep water in Severn River to a point in Spa Creek and an anchorage basin 12 feet deep

Potomac River below Washington, D. C.
Dredging 24-foot channel from mouth of river to Washington $11,011

1940 (cont'd)	Cypress Creek: $2,900 Cumberland, Md. and Ridgely, West Virginia Preparation of plans for flood protection of City $5,681			
		$622,054	$1,180,793	$1,802,847
	GRAND TOTALS	$18,630,804	$12,518,013	$31,148,817

W A R D E P A R T M E N T

SUMMARY OF EXPENDITURES MADE BY THE CORPS OF ENGINEERS

Fiscal Year	New Work	Maintenance	Total
1924	$ 2,013,523	$ 651,152	$ 2,664,675
1925	2,534,235	477,040	3,011,275
1926	1,874,908	202,438	2,077,346
1927	446,503	638,479	1,084,982
1928	152,536	1,098,660	1,251,196
1929	338,250	1,430,149	1,768,399
1930	375,786	697,033	1,072,819
1931	823,818	724,525	1,548,343
1932	975,677	369,450	1,346,127
1933	657,078	354,810	1,011,888
1934	204,348	433,604	637,952
1935	5,050	779,000	784,050
1936	26,415	970,038	996,453
1937	4,336,331	497,465	4,833,796
1938	2,847,560	992,856	3,840,416
1939	396,732	1,020,521	1,417,253
1940	622,054	1,180,793	1,802,847
TOTAL	$ 18,630,804	$ 12,518,013	$ 31,148,817

V E T E R A N S' A D M I N I S T R A T I O N

CONSTRUCTION AND SUPPLIES SERVICE

The Veterans' Administration* administers all laws relating to the relief of, and other benefits provided for, former members of the military and naval forces. It is responsible for extending relief to veterans and to dependents of deceased veterans of all wars. These laws include in addition to compensation and pensions, Government insurance, military and naval insurance, adjusted compensation, emergency officers' retirement pay for veterans of the World War, and hospital and domiciliary care for veterans of all wars.

For the purpose of this report, data was prepared for work completed by the Construction Service of this Administration. The Director of this Service is responsible for preliminary inspection and engineering work in connection with the selection of sites, homes, and other facilities; preparation of plans, specifications and estimates covering construction and alterations, repairs of plant and equipment. He is also responsible for the supervision of the maintenance of buildings, grounds and mechanical equipment under the control of the Veterans' Administration, including motor transportation; general supervision of maintenance and operation of utilities, heating, lighting, electric power, plumbing, sewerage and refuse disposal, water supply, fire protection, refrigerating plants, carpentry, laundry, and telephone installations.

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*The Veterans' Administration was created July 21, 1930 under authorization of the Act of Congress approved July 3, 1930. This Act authorized the President to consolidate and coordinate under a single control all Federal Agencies dealing with the veterans' affairs. The order consolidated in the Veterans' Administration, the Bureau of Pensions (formerly under the Secretary of the Interior), the United States Veterans' Bureau, and the National Home for Disabled Volunteer Soldiers (now known as the National Homes Service). The Veterans' Administration is now an independent establishment under the President.

Expenditures made by the Veterans' Administration in Maryland during the period 1924-1940 have been for additions and improvements at the Veterans' Administration Facility at Perry Point, Maryland. All of the expenditures were from appropriations of the Veterans' Administration or from appropriations made for repair, altering, and improving facilities in the hospitals and homes under jurisdiction of the Administration.

Veterans' Administration Facility
Perry Point, Maryland
Additions and Betterments

1924	(1)	Additional Hospital Buildings	$1,274,645	
	(2)	Improvement to Grounds	18,487	
	(3)	Occupational Therapy Building	25,300	
	(4)	Placing Steam Main Underground	4,750	
				$1,323,182
1925	(1)	Building for Fire Alarm and Telephone Equipment	2,500	
	(2)	Addition to Basement of Diagnostic Building	3,400	
				5,900
1926	(1)	Kitchen and Mess Building, including Refrigeration Plant	217,585	
				217,585
1927	(1)	Grounds Development	11,000	
				11,000
1928	(1)	Construction of Porches on Patients' Buildings	5,328	
				5,328
1929	(1)	Construction of Porches on Patients' Buildings	15,131	
				15,131
1930	(1)	Installing Steam Heat in Quarters Building	9,000	
	(2)	Addition to Refrigeration Plant	5,000	
	(3)	Ash Tipple at Power House	4,360	
				18,849
1931	(1)	Additional Patients Building	193,627	
	(2)	Auxiliary Water Supply	20,760	
				214,387
1932	(1)	Incinerator	8,000	
	(2)	Nurses and Attendants Quarters	240,000	
				248,000
1933	(1)	Addition to Refrigeration Plant	6,490	
	(2)	Corrections to Heating System	10,000	
	(3)	Installation of Pump	3,400	
				19,890
1934	(1)	Boundary Fence	4,450	
				4,450

1935	(1)	Concrete Sidewalks	$ 4,700	$ 4,700
1936	(1)	Storm Sewer	40,000	
	(2)	New Entrance Road	35,000	75,000
1937	(1)	Additional Patients Buildings	496,394	
	(2)	Placing Electric Service Lines Under Ground	24,000	
	(3)	Modernization of Ward Buildings	37,000	558,094
1938	(1)	New Gate House	5,000	
	(2)	Modernization of War Buildings	32,000	37,000
1939	(1)	Landscaping	3,250	
	(2)	Construction of Personnel Garages	2,000	
	(3)	Repair and Replacement of Underground Steam Lines	24,000	29,250
1940	(1)	Dredging Intake Channel	5,400	
	(2)	New Feed Water Heater	19,285	
	(3)	Renovation of Telephone Switchboard	3,010	27,695
		GRAND TOTAL 1924-1940		$ 2,815,441